

## On the Sicilian species of *Pseudomeira* Stierlin (Coleoptera: Curculionidae: Entiminae)

CESARE BELLÒ\* & COSIMO BAVIERA \*\*

\*World Biodiversity Association Via A. Vespucci, 11/A, 31033 Castelfranco Veneto, Italy.

\*\*Department of Animal Biology and Marine Ecology, Messina University, Salita Sperone, 31 98164 Messina, Italy.

### Abstract

Six new species of the weevil genus *Pseudomeira* are described from Sicily: *Pseudomeira erinacea* sp. n., *Pseudomeira ficuzzensis* sp. n., *Pseudomeira himerensis* sp. n., *Pseudomeira natalii* sp. n., *Pseudomeira petrensis* sp. n., *Pseudomeira trinacriae* sp. n.. A neotype of *Pseudomeira reitteri* (Vitale, 1903) and lectotype of *Pseudomeira obscura* (Solari & Solari, 1907) are designated. *Pseudomeira flavipennis sicula* (Seidlitz, 1865), incorrectly indicated from Sicily is newly listed under synonymy of *Pseudomeira flavipennis* (Jacquel du Val, 1852). *Pseudomeira obscurella* Bellò & Pierotti, 1994, is newly recorded for Sicily. Distribution and ecology are provided for each species as well as keys for identification, map and figures.

### Riassunto

Vengono descritte sei nuove specie di *Pseudomeira* di Sicilia: *Pseudomeira erinacea* sp. n., *Pseudomeira ficuzzensis* sp. n., *Pseudomeira himerensis* sp. n., *Pseudomeira natalii* sp. n., *Pseudomeira petrensis* sp. n., *Pseudomeira trinacriae* sp. n.. Il neotipo di *Pseudomeira reitteri* (Vitale, 1903) ed il lectotipo di *Pseudomeira obscura* (Solari & Solari, 1907) vengono designati e redescritti. *Pseudomeira flavipennis sicula* (Seidlitz, 1865), indicata per errore di Sicilia, è messa in sinonimia di *Pseudomeira flavipennis* (Jacquel du Val, 1852). *Pseudomeira obscurella* Bellò & Pierotti, 1994 viene segnalata per la prima volta di Sicilia. Per tutte le specie di *Pseudomeira* di Sicilia vengono fornite informazioni sulla distribuzione e sull'ecologia, una chiave dicotomica per l'identificazione, mappa e foto.

**Key words:** biogeography, Peritelini, Sicily, taxonomy, type designations.

### Introduction

During field surveys conducted by the second author of this paper aiming for a better knowledge of the Sicilian insects (Baviera, 2007; Baviera, 2008, Baviera, 2010; Baviera & Liberti, 2010; Baviera & Magnano, 2010), a special effort was made to collect specimens of Curculionidae, in particular those of the tribe Peritelini of the subfamily Entiminae (Osella et al., 2005). Recent extensive research on the Sicilian species of the genus *Pseudomeira* Stierlin, 1881, one such member of the Peritelini, led to discovery of six new species, in addition to a more complete knowledge of both distribution and ecology of those already known. Moreover, for most of the morphologically separable species, molecular data on COI, COII, 28S were made available as part of a project performing sequence analyses of Peritelini from Sicily (Baviera & Bellò, in preparation).

A taxonomic revision of the species of *Pseudomeira* is carried out in this paper. Six new species are described and previously described species whose diagnoses appeared inadequate have been redescribed in detail. A neotype for *P. reitteri* (Vitale, 1903) and lectotype for *P. obscura* (Solari & Solari, 1907) are designated in order to validate their status. Literature records are limited only to those dealing with Sicilian species. A key to the genera of Peritelini and to the Sicilian *Pseudomeira* is included and is meant to separate only the taxa occurring in Sicily. A checklist of Sicilian *Pseudomeira* is also included.

## Materials and methods

Over 2000 adults of *Pseudomeira* from Sicily, most of them collected by the authors, were at hand during the preparation of this paper, together with data on ecology and ethology of many of them taken from original field records. During the hot dry months of the year most specimens were collected by sifting leaf-litter using sieves with meshes progressively from 10 to 3 millimeters and, then at length, exposing the litter to the sun on white plastic sheets. During the cold months, the leaf-litter (sometimes even washed and then subsequently dried by pressing it between newspapers) was left in a Berlese funnel for one to several weeks. One hundred and eighty localities across Sicily were searched and 116 of them yielded *Pseudomeira*.

The last two abdominal tergites, plus aedeagus, tegmen and spiculum gastrale of males, and ovipositor, spiculum ventrale and spermatheca of females were dissected and mounted in DMHF (Dimethyl Hydantoin-Formaldehyde Resin). Pictures were taken by the first author with a digital camera (Delta Pix Invenio 5S II) connected to a stereomicroscope (Olympus SZH10) and augmented with professional software (Insight). Measurements were made using an Olympus SZH10 stereomicroscope with an ocular grid, as follows: total length from base of rostrum to tip of elytra; pronotal length from anterior margin to base in front of scutellum; pronotal width at the widest point; elytral length from an imaginary line connecting humeri to tip; elytral width at the widest point.

Terminology of some parts of rostrum follows Dönges (1954), and that of genitalia follows Pierotti & Bellò (2000).

Acronyms of the collections where the studied specimens are preserved are: ANG = Fernando Angelini, Franchavilla Fontana, Italy; BAV = Cosimo Baviera, Messina, Italy; BEL = Cesare Bellò, Castelfranco Veneto, Italy; BIN = Giovanni Binaghi, Museo Civico di Storia Naturale, Genova, Italy; DOD = Agostino Dodero, Museo Civico di Storia Naturale, Genova, Italy; FAI = Léon Fairmaire, Museo Civico di Storia Naturale, Genova, Italy; FOR = Romuald Formanék, Narodní Muzeum v Praze, Prague, Czech Republic; GER = Christoph Germann, Hinterkapellen, Switzerland; HEY = Lucas von Heyden, Deutsches Entomologisches Institut, Müncheberg, Germany; HOF = Adolphe Hoffmann, Muséum National d'Histoire Naturelle, Paris, France; LEO = Otto Leonhard, Deutsches Entomologisches Institut, Müncheberg, Germany; LET = Karl Wilhelm Letzner, Deutsches Entomologisches Institut, Müncheberg, Germany; LUI = Paolo Luigioni, Museo Civico di Zoologia, Rome, Italy; MAG = Luigi Magnano, Poggibonsi, Italy; MAN = Cesare Mancini, Museo Civico di Storia Naturale, Genova, Italy; MCT = Museo Civico di Terrasini, Palermo, Italy; MSNG = Museo Civico di Storia Naturale, Genova, Italy; MGI = Muséum d'Histoire Naturelle de la Ville de Genève, Switzerland; MMI = Museo Civico di Storia Naturale, Milano, Italy; MSNV = Museo Civico di Storia Naturale, Verona, Italy; OSE = Giuseppe Osella, L'Aquila, Italy; PES = Carlo Pesarini, Milano, Italy; PIE = Helio Pierotti, Treviso, Italy; RAG = Enrico Ragusa, Università di Catania, Italy; ROT = Arthur Leopold Albert Maria Rottenberg, Deutsches Entomologisches Institut, Müncheberg, Germany; SEI = Georg Karl Maria Seidlitz, Zoologische Staatssammlung, Munich, Germany; SOL = Ferdinando Solari, Museo Civico di Storia Naturale, Milano; STE = Robert Stejskal, Brno, Czech Republic; STI = Wilhelm Gustav Stierlin, Deutsches Entomologisches Institut, Müncheberg, Germany; STU = Peter Stüben, Mönchengladbach, Germany; TOU = Henry Tournier, Muséum d'Histoire Naturelle de la Ville de Genève, Switzerland; VIT = Francesco Vitale, Museo Zoologico "Cambria", Università di Messina, Italy. Acronyms for collections follow the standard Insect and Spider Collections of the World (<http://hbs.bishopmuseum.org/codens/codens-inst.html>) except where noted.

## Results

### *Pseudomeira* Stierlin, 1881

*Pseudomeira* Stierlin, 1881: 160; Stierlin, 1883: 585; Solari, 1955: 39; Pierotti & Bellò, 1998: 90; Alonso Zarazaga & Lyal, 1999: 172; Osella et al., 2005: ; Pierotti et al., 2010: 17.

*Peritelus* (*Pseudomeira*): Lona, 1937: 262.

Type species: *Pseudomeira nicaeensis* Stierlin, 1881.

Redescription: in Pierotti & Bellò (1998).

Species of this genus, distributed in the western Mediterranean, are flightless, cryptic, geophilic and/or shrub-associated weevils (Pierotti & Bellò, 1998; Pierotti et al., 2010). Field research in Sicily confirmed that they are in need

of revision (Pierotti & Bellò, 1995; Pierotti & Bellò, 1998; Pierotti & Bellò, 2000; Pierotti, 2006; Pierotti et al., 2010). The Sicilian species of *Pseudomeira* (Fig. 106) can be divided into four morphologically homogeneous groups whose diagnoses are below; groups are also supported by preliminary data of molecular analysis. In the *exigua* group are included *P. exigua*, *P. pfisteri*, *P. nebrodensis*, and three new species *P. ficuzzensis*, *P. himerensis* and *P. petrensis*. The *vitalei* group consists of *P. vitalei*, *P. reitteri*, *P. doderoi*, *P. solarii*, *P. osellai*, and three new species *P. erinacea*, *P. natalii* and *P. trinacriæ*. The *obscura* group includes *P. obscura* and *P. obscurella*; and the *cossyrica* group has *P. cossyrica* and *P. aeolica*.

The above four groups have different ecological preferences. Those *Pseudomeira* found more or less deep below the surface of the leaf-litter all are in the *exigua* group, whereas the species that are found at the surface of the soil just below the dead leaves belong to the *vitalei* group. The *Pseudomeira* climbing on grasses or bushes are included in the *obscura* or *cossyrica* group. Moreover, phenology is quite different among the groups with species of the first group collected more commonly in winter than in other seasons, while the species of others groups are more commonly collected in spring and/or autumn.

### **The *exigua* species group**

**Diagnosis:** Body elongate, elytra almost flat dorsally, or if elongate-oval, epistoma not or weakly impressed, and nasal plate without raised margin.

#### ***Pseudomeira exigua* (Stierlin, 1861)**

(Figs. 1, 2, 27, 28, 53, 65, 77, 91)

*Otiorhynchus exiguis* Stierlin, 1861:133.

*Peritelus exiguis*: Rottenberg, 1871: 227.

*Peritelus (Meira) exiguis*: Seidlitz, 1868: 31; Bertolini, 1872: 168; Marseul, 1872: 91; Stierlin, 1883: 600; Bertolini, 1899: 89; Ragusa, 1904: 59; Porta, 1932: 63; Lona, 1937: 266.

*Meira exigua*: Heyden *et alii*, 1883 : 151.

*Meira exiguis*: Vitale, 1890: 39; Vitale, 1892: 225 ; Vitale, 1900a : 19.

*Peritelus (Peritelus) exiguis* : Seidlitz, 1865: 291; Luigioni, 1929: 873.

*Pseudomeira exigua*: Abbazzi et al., 1995: 23; Pierotti & Bellò, 1998: 105; Sparacio, 1999: 138; Colonnelli, 2003: 48; Osella et al., 2005; Pierotti , 2006: 25; Pierotti, 2009: 481; Abbazzi & Maggini, 2009: 61.

**Type locality:** Sicily, Palermo, Monte Pellegrino (Fig. 107).

**Diagnosis:** Small (2.9–3.8 mm), elongate-subcylindrical. Epistoma slightly depressed, clypeus slightly gibbous and longitudinally impressed in middle. Elytra clothed with pale brown scales and recumbent slanted setae. Apex of aedeagus sub-triangular and quite sharp.

**Description:** For a complete redescription see Pierotti (2009).

**Distribution:** Known only from the surroundings of Palermo.

**Material:** A total of 118 ex, male and female. Genitalia of 11 were studied, and molecular preparations of 2 (1 male, 1 female) were made.

**Localities:** Palermo (BIN, DOD, HOF, LET, LUI, ROT); Monte Pellegrino 400 m (BAV, BEL, MSNG, MGI, PIE, RAG, SOL). All literature records from localities other than the above refer to different species.

**Ecology:** Adults are found from late autumn to late spring, although some specimens appear early in autumn. We collected adults of *P. exigua* and *P. pfisteri* together, always while sifting leaf litter under *Rubus* sp. and *Olea europaea* L. var. *sylvestris* Brok. in the grazed land of Monte Pellegrino at 400 m a.s.l. (Fig 107).

**Reproduction:** Amphigonic.

**Notes:** The lectotype and the two paralectotypes are in STI. Although in the original description Stierlin (1861) gave as locality “Sicilien”, and the label under the lectotype reads “Sicilien”, we are sure that the type locality is Palermo, Monte Pellegrino. This is not only because adults of the species are common there, but also because this was the exact locality where entomologists collected at those times (Rottenberg, 1871; Ragusa, 1874; Ragusa, 1904). In the Ragusa collection there is a specimen with the green label “m. exigua ex tipo Strl. non pfisteri” to point out how difficult it has always been to distinguish the two close species.

***Pseudomeira pfisteri* (Stierlin, 1864)**

(Figs. 3, 29, 78, 92)

*Cathormiocerus pfisteri* Stierlin, 1864:150.

*Peritelus pfisteri* : Rottenberg, 1871: 227; Vitale, 1906a: 85.

*Peritelus (Meira) pfisteri* : Seidlitz, 1868: 31,32; Bertolini, 1872: 168; Marseul, 1872: 91; Stierlin, 1883: 600; Bertolini, 1899: 89; Ragusa, 1904: 59; Porta, 1932: 63; Lona, 1937: 266.

*Meira pfisteri* : Heyden et alii, 1883 : 151 ; Vitale, 1890: 39; Vitale, 1892: 225; Vitale, 1900a: 19; Vitale, 1904: 13.

*Peritelus (Peritelus) pfisteri* : Seidlitz, 1865: 291; Luigioni, 1929: 873.

*Peritelus (Pseudomeira) pfisteri* : Péricart, 1963: 40.

*Pseudomeira pfisteri* : Pierotti & Bellò, 1994: 116; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1998: 105; Sparacio, 1999: 138; Colonnelli, 2003: 48; Osella et al., 2005; Pierotti, 2006: 25; Pierotti, 2009: 481; Abbazzi & Maggini, 2009: 62.

**Type locality:** Sicily, Palermo, Monte Pellegrino (Fig. 107).

**Diagnosis:** Small (3.4–3.6 mm), elongate-subcylindrical. Epistoma hardly noticeable, clypeus slightly gibbous and longitudinally impressed in middle. Elytra clothed with brown scales and clubbed or spatulate, recumbent setae.

**Description:** For a redescription of the lectotype see Pierotti (2009).

**Distribution:** Known only from the type locality.

**Material:** A total of 88 females were examined. Genitalia of 4 were studied, and molecular data were obtained from 2.

**Localities:** Palermo (LET, ROT): Monte Pellegrino 400 m (BAV, BEL, MCT, PIE, SOL). All literature records from localities other than the above refer to different species.

**Ecology:** Adults are found from the beginning of the winter to the end of the spring, only a few aestivating individuals can be found in autumn. *P. pfisteri* has often been collected by us, together with *P. exigua*, sifting leaf litter under *Rubus* sp. and *Olea europaea* L. var. *sylvestris* Brok. in the grazed land of Monte Pellegrino at 400 m a.s.l. (Fig. 107). In November *P. pfisteri* is common, whereas it is uncommon in March.

**Reproduction:** Parthenogenetic.

**Notes:** The lectotype is in HEY and the paralectotype in STI. As in the case of *P. exigua* above, although the lectotype bears only the Stierlin handwritten label “Sicil”, we think that the type locality is Palermo, Monte Pellegrino for the same reasons mentioned above for *P. exigua*.

***Pseudomeira nebrodensis* Pierotti, 2009**

(Figs. 4, 30, 79, 93)

*Pseudomeira nebrodensis* Pierotti, 2009: 481 (pars).

**Type locality:** Sicily, Messina, Monti Nebrodi - San Fratello.

**Diagnosis:** Small (3.4–3.6 mm), elongate-subcylindrical. Epistoma feebly excavate, clypeus almost flat and longitudinally impressed in middle. Elytra clothed with brown scales and rather thick almost recumbent setae.

**Description:** For a description see Pierotti (2009).

**Distribution:** Known only from the type locality.

**Material:** A total of 55 females were examined. Genitalia of 4 were studied, and molecular data of 3 were obtained.

**Localities:** Messina, Monti Nebrodi, San Fratello (BAV, BEL, PIE, STU).

**Ecology:** Adults occur in spring, collected together with *P. natalii* n. sp. by sifting leaf litter under *Olea europaea* L. var. *sylvestris* Brok. Adults may occur also in autumn, although we have not collected them at that time of year.

**Reproduction:** Parthenogenetic.

**Notes:** Field research and preliminary molecular studies revealed that in the locality mentioned above near Messina, two species occur: one *P. nebrodensis*, is parthenogenetic and belongs to the *exigua* group, whereas the second, *P. natalii* n. sp., is amphigonic and belongs to the *vitalei* group. Obviously, the aedeagus figured by Pierotti (2009) of the supposed male of *P. nebrodensis*, instead is that of *P. natalii* n. sp., while the diagnosis and the description of the female holotype clearly are those of *P. nebrodensis* (Figs. 4, 19, 20).

***Pseudomeira ficuzzensis* sp. n.**

(Figs. 5, 31, 80, 94)

**Diagnosis:** Small (3.30–3.80 mm), elongate-subcylindrical; frons wide; epistoma slightly impressed, clypeus almost flat and shortly longitudinally impressed in middle; elytra with humeri rounded, clothed by dense brown scales here and there paler, and suberect setae with slightly widening apex; spermatheca as figured on Fig. 94.

**Type series:** Holotype female (BEL) with following labels: "♀" [white, printed], [transparent label with genitalia in DHMF], "I, Sic., Palermo, Sicani, Bosco Ficuzza loc. Crocefisso m.900, 16.IV.2010" [white, printed], "vaglio sotto *quercus* legg. Baviera, Bellò & Chemello" [white, printed], "coll. Cesare Bellò" [green, printed]; "PABF 2.1" [white, printed], "*Pseudomeira ficuzzensis* sp. n., Holotype, det. Bellò 2010" [red, partly printed]. Paratypes: 3 females, "Sicilia, Palermo, Ficuzza, loc. Crocefisso, N 37°51.945" E 013°23.223", 910 m, 20.IV.06, sotto *Quercus* sp., leg. Bellò" (BEL, PIE); 1♀, ibidem, 29.VI.07, leg. Bellò (BEL); 20 females, "Corleone (Palermo) Ficuzza, 13.V.2007, leg. Pierotti" (PIE); 1 females, "I., Sic., PA, Sicani, bosco Ficuzza, loc. Crocefisso, 900 m, vaglio sotto *Quercus*, 16 IV 2010, leg. Baviera, Bellò & Chemello" (BAV). Molecular analyses were made of 2 of the 26 paratypes at hand.

**Other material:** A single female labeled "PA, Ficuzza, Alpe Cucco, m 1000, v.[ag]lio lettiera *Quercus*, 10/13–III-'09, legg. Baviera & Bellò" (BEL) and three females labeled "S. PA, Sicani, Ficuzza, Alpe Cucco "B", 950 m, *Quercus* & *Hedera*, N 37°51.818" E 013°25.033", 25.IX.2010, leg. Baviera" (BEL), provisionally considered as belonging to this species.

**Holotype** female: Length: 3.80 mm. Body elongate, elytra longer than wide, with subparallel sides. Dorsal vestiture of imbricate dark brown scales and suberect setae with slightly widening apex; paler small markings on disc of both elytra and pronotum.

Rostrum subquadrate, barely narrowing towards apex. Epistoma slightly depressed, plate without bulging edges; pterygia evident; clypeus enlarged apically, with longitudinal depression not continuing on frons; frons almost twice as wide as clypeus between antennae. Eyes convex. Antennae short and robust; scape more robust than funicle with curved base and progressively thickening towards apex; first five funicular segments with clubbed setae; first segment shorter than combined length of following two, second slightly longer than third, segments 4–7 pearl-shaped; club short, fusiform and with first segment widely conical.

Pronotum slightly transverse (length: 0.80 mm, width: 0.90 mm), sides sinuate, disc with punctures usually hidden by scales.

Elytra rather elongate (length: 2.40 mm, width: 1.65 mm), sub-cylindrical, disc almost flat, humeri short, round and slightly prominent. Striae inconspicuous, catenate, interstriae feebly convex. Legs reddish; femora only slightly clubbed, edentate; tibiae straight, external margin of apex of protibiae blunt, internal apical margin devoid of spines but with apical mucro; protarsi short and robust, third joint shortly bilobed, onychium curved, claws fused at base.

Spiculum ventrale: Fig. 80; spermatheca: Fig. 94.

**Paratypes.** Holotype and paratypes differs only in size dimensions. Length: 3.30–3.80 mm. All paratypes are females.

**Distribution:** Known only from the type locality.

**Etymology:** From the 'Bosco della Ficuzza', at the foot of the mountain 'Rocca Busambra'.

**Ecology:** Adults have been sifted from compacted leaf-litter in late spring. They are not evident during the hot dry summer, and probably overwinter deeper in the soil.

**Reproduction:** Apparently parthenogenetic.

***Pseudomeira himerensis* sp. n.**

(Figs. 6, 7, 32, 33, 54, 66, 81, 95)

**Diagnosis:** Small (3.10–3.90 mm), elongate-subcylindrical. Epistoma inconspicuous, clypeus almost flat and weakly impressed in middle; frons wide. Elytra with rounded humeri, clothed with dense golden-brown scales here and there paler, and almost flattened short spatulate pale setae. Apex of aedeagus sharp (Fig. 54).

**Type series:** Holotype male (BEL) with the following labels: [transparent label with genitalia in DHMF], "♂" [white, printed], "Sicilia, Palermo, Termini Imerese, 15.III.08" [white, printed], "al vaglio lettiera *Olea e. sativa*" [white, printed], "legg. Bellò & Chemello, Baviera & Rando" [white, printed], "coll. Cesare Bellò" [green, printed];

"*Pseudomeira himerensis* sp. n., Holotype, det. Bellò 2010" [red, partly printed]. Paratypes: 1 male and 12 females, "Sicilia, Palermo, Termini Imerese, vaglio lettiera *Olea e. sativa*, 25-IV-06, leg. Bellò" (BEL, PIE); 1 female, ibidem, leg. Pierotti (PIE); 27 females, ibidem, 15.III.08, leg. Bellò (BEL); 2 males and 30 females, ibidem, 10/13-III-09, legg. Bavieria & Bellò (BAV, BEL); 13 females, "I, Sicilia, Pa, Termini Imerese, vaglio *Olea e. sativa*, 21-IV-2010, leg. Bellò" (BEL). Types are 88 (4 males and 84 females), genitalia of 19 (4 males and 15 females) were studied and molecular analyses were made of 3 females.

**Holotype** male: Length: 3.10 mm. Rather elongate, elytra clearly longer than wide, subparallel sided. Dorsal vestiture of imbricate, golden brown scales and almost flattened short pale spatulate setae; paler small markings on disc of both elytra and pronotum.

Rostrum subquadrate, subparallel sided. Epistoma and plate inconspicuous; pterygia evident; clypeus slightly convex, with longitudinal depression not continuing on frons; frons almost twice as wide as clypeus between antennae. Eyes small, moderately convex. Antennal scape more robust than funicle, curved at basal third and progressively thickening towards apex; first six funicular segments with clubbed setae; first segment shorter than combined length of following two, second slightly longer than third, segments 4-7 pearl-shaped; club short, fusiform and with first segment widely conical.

Pronotum almost as long as wide (length: 0.78 mm, width: 0.80 mm), sides sinuate, disc with punctures usually hidden by scales.

Elytra rather elongate (length: 2.40 mm, width: 1.65 mm), subcylindrical, disc almost flat, humeri short, round and slightly prominent. Striae inconspicuous, catenulate, interstriae feebly convex.

Legs short and robust; femora clubbed, edentate; tibiae straight, external margin of apex of protibiae blunt, internal margin devoid of spines but with apical mucro; protarsi short and robust, third joint shortly bilobed, onychium curved, claws short and fused at base.

Apex of aedeagus sharp (Fig. 66).

**Paratypes:** Holotype and male paratypes are shorter than female paratypes. Spiculum ventrale: see Fig. 81, spermatheca: Fig. 95. Length: mm 3.10-3.90.

**Distribution:** Known only from the type locality.

**Etymology:** From the name of the ancient Greek town of 'Himera', near the present-day Termini Imerese.

**Ecology:** Adults have been sifted from the leaf-litter of an olive grove on a moist clay soil. They have been found from late winter to early spring, and were not present when the soil became dry. The new species has been collected together with an unidentified species of *Dolichomeira* Solari, 1955, members of which usually appear in winter.

**Reproduction:** Possibly amphigonic. It is noteworthy that only 4 males out of 88 specimens have been found. Further research is needed to rule out if we are faced with two species: one amphigonic and one parthenogenetic.

### *Pseudomeira petrensis* sp. n.

(Figs. 8, 34, 82, 96)

**Diagnosis:** Small (3.25-3.95 mm), elongate; epistoma inconspicuous, clypeus longitudinally excavate; frons wide and shallowly impressed; elytra with rounded humeri, clothed by dense imbricate earth-brown scales here and there paler, and almost recumbent short spatulate pale setae, disc quite flat.

**Type series:** Holotype female (BEL) with the following labels: [transparent label with genitalia in DHMF], ♀[white, printed], "S.[icilia], Palermo, Madonie, (b), Piano Battaglietta, m.1650, 16.VI.08" [white, printed], "al vaglio, legg. Bavieria C. & Rando A." [white, printed], "coll. Cesare Bellò" [green, printed]; "*Pseudomeira petrensis* sp. n., Holotype, det. Bellò 2010" [red, partly printed]. Paratypes: 2 females, "Sicilia (Palermo) 10 Km. NW Petralia Soprana, P.R. Madonie, 1400 m., 37°51'45" N 14°00'39" E, 13.X.2002, leg. Stüben" (STU); 1 female, "Italy: Sicilia (Palermo) 10 Km. NW Petralia Soprana, P.R. Madonie, 1000 m. 37°50'29" N 14°00'39" E, 13.X.2002, leg. Stüben" (STU); 1 female, "Italy: Sicilia (Palermo) 9 Km. NW Petralia Soprana, P.R. Madonie, 1400 m., 37°51'45" N 14°02'52" E, 13.X.2002, leg. Stüben" (PIE); 1 female, ibidem, leg. Stüben (BEL); 2 females, "Sic.[ilia], Palermo, Madonie, Piano Battaglietta, m.1650, 24.IV.08, legg. Bellò, Chemello, Bavieria & Rando" (BAV, BEL); 1 female, "Sicilia, Palermo, Madonie, Piano Battaglietta, m 1600; 30.V.07, leg. Bellò" (BEL); 4 females, "Sicilia, Palermo, Madonie, Piano Battaglietta B, 1600 m, 23.IX.10, Acer, N 37°51'838" E 13°25'033",

leg. Baviera" (BAV, BEL). Types are 16 females, genitalia of 3 were studied and molecular data was obtained from another.

**Holotype** female: Length: 3.25 mm. Rather elongate, subparallel sided. Dorsal vestiture of largely overlapping, earth-brown scales and almost recumbent short pale more or less widely spatulate setae; paler small markings on disc of both elytra and pronotum.

Rostrum transverse, subparallel sided. Epistoma and plate inconspicuous; pterygia just slightly protruding; clypeus slightly convex, with longitudinal depression not continuing on frons; frons almost twice as wide as clypeus between antennae. Eyes small, round, almost hemispherical. Antennae short and quite robust; scape just slightly more robust than funicle, curved at basal third and progressively thickening towards apex; all seven funicular segments with clubbed setae; first segment as long as combined length of following two, second twice as long as third, segments 4–7 pearl-shaped; club short, fusiform and with first segment widely conical.

Pronotum slightly transverse (length: 0.80 mm, width: 0.90 mm), sides sinuate, disc with punctures usually hidden by scales.

Elytra rather elongate (length: 1.95 mm, width: 1.40 mm), disc almost flat, humeri short, round and slightly prominent. Striae inconspicuous, catenulate, interstriae feebly convex.

Legs short and robust; femora clubbed, edentate; tibiae almost straight, external margin of apex of protibiae blunt, internal margin devoid of spines but with mucro; protarsi short and robust, third joint shortly bilobed, onychium curved, claws short and fused at base.

Spiculum ventrale: see Fig. 82; spermatheca: see Fig. 96.

**Paratypes:** Holotype and paratypes differs only in size dimensions. Length: 3.25–3.95 mm. All paratypes are females.

**Distribution:** Known only from the Sicilian Madonie mountain range above 1000 m a.s.l. (fig 108).

**Etymology:** From the town of Petralia Soprana whose name comes from the Greek πέτρα λεία (smooth stone).

**Ecology:** This is a montane species collected in beech and oak woods sifting roots of *Astragalus* sp. and *Euphorbia* sp.. Adults appear in spring, with a probable life span of some months until autumn, and possibly overwintering.

**Reproduction:** Apparently parthenogenetic.

## The *vitalei* species group

**Diagnosis:** Body oval to elongate, epistoma impressed, and nasal plate with raised margin (Fig. 105).

### *Pseudomeira vitalei* (Desbrochers, 1892)

(Figs. 9, 10, 35, 36, 55, 67, 83, 97)

*Peritelus vitalei* Desbrochers, 1892: 7; Vitale, 1892: 219; Bertolini, 1899: 89; Vitale, 1900a: 19; Vitale, 1901: 426; Vitale, 1902: 2; Vitale, 1903a: 13; Vitale, 1904: 13; Ragusa, 1904: 58; Vitale, 1906a: 85.

*Peritelus (Meira) vitalei* : Solari & Solari, 1907: 120; Porta, 1932: 66.

*Peritelus (Peritelus) vitalei* : Vitale, 1892: 225; Luigioni, 1929: 873.

*Peritelus (Pseudomeira) vitalei* : Lona, 1937: 265.

*Pseudomeira prope vitalei* : Colonnelli, 1974: 134; Angelini, 1986: 115.

*Pseudomeira vitalei* : Solari, 1955: 50; Magnano & Osella, 1973: 105; Abbazzi & Osella, 1992: 305; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1995: 530; Pierotti & Bellò, 1998: 105; Sparacio, 1999: 138; Colonnelli, 2003: 49; Osella et al., 2005; Abbazzi & Maggini, 2009: 62.

**Type locality:** Sicily, Messina.

**Diagnosis:** Small to middle-sized (2.8–4.5 mm), elongate-oval. Epistoma impressed, clypeus almost flat. Elytra with rounded humeri, clothed by earth-brown scales and almost recumbent rather thick setae. Aedeagus with narrowly ogival apex (Fig. 67)

**Description:** Small, quite robust. Elytra slightly longer than wide, clothed, like the pronotum, with more or less imbricate earth-brown scales here and there paler, and elongate more or less recumbent setae.

Rostrum transverse, more so in females, sides not or weakly converging apically. Epistoma impressed and with bulging edges; pterygia slightly protruding; clypeus narrowing in middle, with a longitudinal depression usually continuing that on frons; frons almost twice as wide as clypeus between antennae. Eyes quite large, slightly convex. Antennae robust; scape just slightly more robust than funicle, curved at basal third and progressively thickening towards apex; the first three funicular segments with clubbed setae; segments 4–7 transverse; club robust and with the first segment widely conical.

Pronotum transverse, sides rounded, disc with punctures usually hidden by the scales.

Elytra quite convex, slightly longer than wide. Striae formed by obvious punctures, interstriae feebly convex.

Legs moderately robust; external margin of protibiae straight almost to the blunt apex.

Aedeagus in dorsal view narrowing to the apical third, then ogival toward the rounded apex, quite regularly curved in profile.

**Distribution:** Sicily. Indicated by Vitale (1906a) from the Messina province (Monte Ciccio, Scala, etc.), and with doubt from the Mount Pollino, Serra delle Ciavole, Calabria by Colonnelli (1974). These specimens from Calabria, studied by the first author, are actually adults of *P. obscura* (Solari & Solari, 1907).

**Material:** Two female syntypes are preserved in HEY with the following labels: "Messina" [white, handwritten]; "coll. Stierlin" [white, printed]; "Syntypus" [red, printed]. A total of 725 specimens were examined; genitalia of 86 were studied, and molecular analysis was made of 30 males and females.

**Localities:** Messina (BAV, DOD, HEY, HOF, LUI, MAN, MMI, OSE, RAG, SOL, VIT); Acquarone (BAV, BEL), Bordera (SOL), Calamarà (BIN, DOD, SOL, VIT), Campo Italia (BAV, BEL), Castanea (BEL, BIN, OSE, PIE, SOL, VIT), Colla (OSE, RAG, SOL, VIT), Cuddudà (VIT), Curcuraci (BAV, BEL), Francavilla di Sicilia (BEL, PIE), Gazzi (SOL, VIT), Granatari (BAV, BEL), Milazzo (BAV, BEL), Monte Ciccio (BEL, PIE), Rocca-lumera (BEL, OSE, PIE), Scala (RAG, SOL), Tono (BAV, BEL).

Catania: Castiglione di Sicilia (BAV, BEL);

Isole Eolie: Lipari, Acquacalda (BEL, PIE), Quattrochi (BEL, PIE), Capistello (BEL, BAV), San Nicola (BAV, BEL), Terme San Calogero (BAV, BEL); Panarea loc. Calcaro (BAV, BEL).

**Ecology:** Specimens have been collected by sifting leaf-litter taken beneath *Olea europaea europaea* L., *Cistus* sp. and *Quercus* sp. Adults occur from late winter to late spring, then they aestivate, and can be found again in autumn from the start of the rainy season until the beginning of the winter. Vitale collected several examples of this species around Messina at the beginning of January, beating bundles of freshly cut heather on a large white napkin (Vitale, 1902). He also wrote (Vitale, 1904) that it was quite difficult to collect them because of their cryptic colour mimicking the small *Erica* and soil debris.

**Reproduction:** Amphigonic.

**Notes:** Individuals from the Aeolian Islands are quite different from those collected in the surroundings of Messina, and are provisionally attributed to this species awaiting the collection of more abundant material allowing for molecular studies.

### ***Pseudomeira reitteri* (Vitale, 1903)**

(Figs 11, 12, 37, 38, 56, 68, 84, 98)

*Peritelus reitteri* Vitale, 1903a: 21; Vitale, 1903b: 8; Ragusa, 1904: 58; Vitale, 1905: 183; Vitale, 1906b: 85; Pic, 1908: 44; Solari & Solari, 1907: 119.

*Peritelus (Peritelus) reitteri* : Luigioni, 1929: 873.

*Peritelus (Pseudomeira) vitalei* : Lona, 1937: 264.

*Pseudomeira reitteri* : Abbazzi et al., 1995: 23; Pierotti & Bellò, 1995: 530; Pierotti & Bellò, 1998: 105; Sparacio, 1999: 136; Colonnelli, 2003: 48; Osella et al., 2005; Pierotti, 2009: 482; Abbazzi & Maggini, 2009: 62.

**Type locality:** Sicily, Castroreale Bagni (Messina).

**Diagnosis:** Middle-sized (3.4–4.5 mm), elongate-oval. Epistoma impressed, clypeus almost flat and longitudinally impressed medially. Elytra clothed by earth-brown scales and elongate rather thick with suberect setae. Aedeagus with rounded slightly lobate apex (Fig. 68).

**Description:** Small, dorsal vestiture of strongly imbricate earth-brown scales and suberect quite thick setae whose apex is slightly widening, more so on apical declivity. Pronotum with a darker band on each side, dark spots are also around scutellum, at the base of interval 5, and here and there on elytra, mainly on apical declivity.

Rostrum strongly transverse, sides not or very weakly converging apically. Epistoma deeply impressed with bulging edges; pterygia not or just slightly protruding; clypeus very deeply impressed longitudinally; frons higher than rostrum, with a distinct median impression. Eyes barely protruding from head outline. Antennae quite robust; scape curved at basal third and progressively thickening towards apex; second funicular segment at least 1.5 times as long as wide, the following pearl-shaped and more or less transverse; club quite robust and with the first segment widely conical.

Pronotum more (♂) or less (♀) transverse, base not wider than anterior margin, sides rounded, disc with punctures thick and deep, partially hidden by the scales.

Elytra subparallel sided. Striae formed by obvious punctures, interstriae feebly convex.

Legs quite robust; external margin of protibiae straight almost to the shortly rounded apex.

Aedeagus: see Figs. 56, 68. Spiculum ventral: see Fig. 84. Spermatheca: see Fig. 98.

**Distribution:** Sicily.

**Neoty whole**: After a careful search in the Vitale collection and in those of all entomologists (Desbrochers, Ragusa, Solari, etc.) to whom he used to donate or exchange specimens, we could not locate any type. We concluded that most probably the type(s) has been destroyed by the earthquake of 1908 when most of the insects collected by Vitale before this date got lost. According to the rules of the art. 75 of the International Code (ICZN, 1999), to fix the name we select here a male neotype (VIT) from the type locality labeled as follows: "♂" [white, printed], "Sicilia-ME-Castroreale, 24.IV.06 leg. Bellò" [white, printed], "N 38°05.750" E 015°11.906" [white, printed], "al vaglio lettiera *Olea europaea*" [white, printed], "Pseudomeira reitteri (Vitale, 1903) det. C. Bellò," [white, printed], "coll. Cesare Bellò" [green, printed]; "Pseudomeira reitteri (Vitale, 1903), NEOTYPUS des. Bellò, 2010" [red, partly printed].

**Material:** A total of 397 specimens were examined; genitalia of 51 were studied, and molecular data were obtained from 14 males and females.

**Localities:** Messina (DOD, FOR, HOF, SOL, VIT): Basicò (BAV, BEL); Brolo (BEL); Campogrande (BEL, OSE, PIE); Castroreale Bagni (BEL, PIE, BAV); Gazzi (HOF, VIT); Mazzarà (RAG), Novara Sicula (SOL); Ortigliuzzo (BAV, BEL); San Pier Niceto (BAV, BEL), Termini Bagni (RAG).

**Ecology:** Specimens have been collected by sifting leaf-litter taken beneath *Olea europaea europaea* L. and *Quercus* sp., whereas Vitale (1903) found them in winter "sotto scorse al pedale di un vecchio olivo". The aestivating, often worn, adults survive until the beginning of the winter.

**Reproduction:** Amphigonic.

### *Pseudomeira doderoi* F. Solari, 1955

(Figs. 13, 39, 57, 69)

*Pseudomeira doderoi* F. Solari, 1955: 52; Pierotti & Bellò, 1994: 114; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1998: 106; Sparacio, 1999: 138; Colonnelli, 2003: 48; Osella et al., 2005; Pierotti, 2006: 25; Pierotti, 2009: 482; Abbazzi & Maggini, 2009: 61.

**Type locality:** Sicily, Pachino.

**Diagnosis:** Small to middle-sized (2.8–4.0 mm), elongate-oval. Epistoma impressed, clypeus almost flat and a shallowly impressed in middle. Elytra clothed by earth-brown scales and thick with almost suberect setae. Aedeagus ogival with blunt apex (Fig. 69).

**Description:** Middle-sized, quite robust. Elytra longer than wide, disc quite flat. Dorsal vestiture of largely overlapping earth-brown scales and half-lifted short thick more or less suberect setae; paler small markings are on both elytra and pronotum.

Rostrum, particularly that of females, transverse, sides not or hardly narrowing towards apex. Epistoma depressed with feebly bulging edges; pterygia just slightly protruding; clypeus slightly enlarged basally, with a longitudinal depression usually continuing that on frons; frons almost twice as wide as clypeus between antennae. Eyes slightly convex. Antennae robust; scape curved near the base and progressively thickening towards apex; all funicular segments with clubbed setae; segments 4–7 pearl-shaped; club not so thick, with the first segment widely conical and with sharp apex.

Pronotum transverse, sides sinuate, disc with punctures usually hidden by the scales.

Elytra longer than wide, flattened on disc. Striae conspicuous, interstriae feebly convex and bearing short apically enlarged lifted setae.

Legs robust; external margin of protibiae straight up to the blunt apex.

Aedeagus: see Figs. 57, 69.

**Distribution:** Sicily (Pierotti & Bellò 1994).

**Material:** The male holotype (SOL) bears the following labels: [transparent label with dry genitalia], "Pachino, Sicilia, 13/17.V.1906" [white, handwritten], "doderoi holotypus" [white, handwritten], "P. doderoi Solari i. litt." [white, handwritten]; "foto Bellò 2011" [yellow, handwritten]. A total of 180 specimens were examined. Genitalia of 35 were studied, and molecular data were obtained from 4 males and 2 females.

**Localities:** Siracusa: Buscemi (BAV, BEL, PIE); Ferla (OSE, PIE, BAV, BEL); f. Marcellino (BEL, OSE); f. Cassibile (BEL, PIE); Melilli (BEL, PIE); Pachino (BIN, DOD, HOF, MAN, SOL); Pantalica (BAV, BEL, MAG); Sortino (BAV, BEL, OSE, PIE, STU); Vendicari (ANG); Zocco (BEL, PIE); Palazzolo Acreide (ANG, BAV, BEL). Ragusa: Giarratana (BAV, BEL).

**Ecology:** We collected adults in spring by sifting leaf-litter beneath *Quercus* sp., *Rubus* sp. and *Olea europaea* L. The weevils aestivate, and can be found again from the beginning of to late autumn.

**Reproduction:** Amphigonic.

### ***Pseudomeira solarii* (Péricart, 1963)**

(Figs. 14, 15, 40, 41, 58, 70, 85, 99)

*Peritelus (Pseudomeira) solarii* Péricart, 1963: 40.

*Pseudomeira solarii*: Pierotti & Bellò, 1994: 113; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1998: 106; Sparacio, 1999: 138; Colonnelli, 2003: 49; Osella et al., 2005; Pierotti, 2006: 25; Pierotti, 2009: 482; Abbazzi & Maggini, 2009: 62.

**Type locality:** Gibilmana (Palermo).

**Diagnosis:** Middle-sized (3.3–4.5 mm), rather elongate oval. Epistoma impressed, clypeus almost flat and longitudinally impressed in middle; elytra clothed by earth-brown scales and rather thick elongate suberect setae, here and there both paler. Aedeagus widely ogival with shortly blunt apex.

**Description:** Middle-sized, quite robust. Elytra slightly longer than wide. Dorsal vestiture of more or less overlapping earth-brown scales and almost suberect short elongate setae; paler small markings are on both elytra and pronotum.

Rostrum, particularly that of females, transverse, sides not or weakly narrowing towards apex. Epistoma depressed with bulging edges; pterygia slightly protruding; clypeus slightly narrowing towards base, with a longitudinal depression usually continuing that on frons; frons almost twice as wide as clypeus between antennae. Eyes quite large and slightly convex. Antennae moderately thin; scape curved and progressively thickening towards apex; first 3 funicular segments with clubbed setae; segments 4–7 pearl-shaped; club thick, with the first segment widely conical and sharp apex.

Pronotum transverse, sides sinuate, disc with punctures usually hidden by the scales.

Elytra almost oval, slightly longer than wide. Striae conspicuous, interstriae feebly convex.

Legs robust; external margin of protibiae almost straight up to the blunt apex.

Aedeagus: see Figs. 58, 70.

**Distribution:** Northwestern Sicily (Madonie and western Nebrodi).

**Material:** The male holotype (SOL) bears the following labels: [transparent label with dry genitalia], "Gibilmana, Madonie (Sicilia), (legit) Ragusa" [white, handwritten], "Type" [red, printed], "Holotypus" [red, printed], "Pseudomeira solarii, holotypus ♂, J. Péricart, det." [white, partly printed], "3673 solarii nov." [white, handwritten]; "foto Bellò 2011" [yellow, handwritten]. A total of 164 specimens were examined; genitalia of 36 were studied, and molecular data were obtained from 3 males and 2 females.

**Localities:** Palermo: Gibilmana (ANG, BEL, PIE, SOL); Castelbuono (BAV, BEL); Isnello (BAV, BEL); Madonie: La Liccia (BAV, BEL), Piano Battaglietta (BAV, BEL), Piano Zucchi (BAV, BEL); Messina: Caronia (BEL, PIE); Reitano (BAV, BEL, PIE); Sicilia (MSNV).

**Ecology:** Adults were collected in spring under *Quercus* sp., *Genista* sp., *Prunus* sp., *Fraxinus* sp., *Pistacia* sp., *Smilax* sp. We found this species at Gibilmana together with *Heteromeira neapolitana* (Faust, 1890).

**Notes:** This species is described based on a single specimen from Gibilmana. Specimens from Ficuzza (Péricart, 1963; Pierotti & Bellò, 1994), Rocca Busambra and Pezzingoli di Pioppo (Pierotti & Bellò, 1994), already indicated as slightly differing from the topotypic ones, actually belong to *P. erinacea* sp. n. here described.

**Reproduction:** Amphigonic.

#### ***Pseudomeira osellai* Pierotti & Bellò, 1994**

(Figs. 16, 17, 42, 43, 59, 71, 86, 100)

*Pseudomeira osellai* Pierotti & Bellò, 1994: 107; Pierotti & Bellò, 1998: 106; Colonnelli, 2003: 48; Osella et al., 2005; Abbazzi & Maggini, 2009: 62.

**Type locality:** Sicily, Monti Iblei, Bosco Baulì.

**Diagnosis:** Small (2.8–3.8 mm), rather elongate oval. Epistoma impressed with just slightly bulging edges, clypeus almost flat and longitudinally feebly impressed in middle; elytra clothed by earth-brown scales and rather thick suberect setae; aedeagus with sides converging from apical third and apex sharp.

**Description:** See Pierotti & Bellò (1994).

**Distribution:** Known only from the type locality.

**Material:** A total of 53 specimens, including the holotype in PIE were examined. Genitalia of 4 were studied.

**Localities:** Siracusa: Monti Iblei, Bosco Baulì (BEL, OSE, PIE).

**Ecology:** Adults were sifted from leaf-litter below *Quercus ilex* L. and *Q. cerris* L., and found under the nearby stones.

**Reproduction:** Amphigonic.

#### ***Pseudomeira erinacea* sp. n.**

(Figs. 18, 44, 87, 101)

*Peritelus (Pseudomeira) solarii* Péricart, 1963: 40 (pars).

*Pseudomeira solarii* : Pierotti & Bellò, 1994: 113 (pars).

**Diagnosis:** Middle-sized (3.70–5.00 mm), suboval. Epistoma impressed, clypeus almost flat and longitudinally rather deeply impressed in middle; elytra clothed by earth-brown scales and rather thin almost erect setae, here and there both paler.

**Type series:** Holotype female (BEL) with the following labels: "♀" [white, printed], [transparent label with genitalia in DHMF], "I, Sic.[ilia], Castiglione di Sic.[ilia], 600 m, vaglio sotto *Olea* sp., 26.V.09, leg. Baviera" [white, printed], "coll. Cesare Bellò" [green, printed]; "MECG 1.2" [green, handwritten], "Pseudomeira erinacea sp. n., Holotype, det. Bellò 2010" [red, partly printed]. Paratypes: 3 females, I, Sic., Castiglione di Sic., m 600, vaglio sotto *Olea*, 26.V.09, leg. Baviera (BAV, BEL); 3 females, I, Sic., Catania, Castiglione di Sicilia, 600 m, vaglio sotto *Olea*, 19.IV.2010, N 37°52.27'6, E 015°07.5'8, legg. Baviera & Bellò (BEL); 9 females, Sicilia, ME, Nebrodi, foresta Malabotta, 23.VI.07, sotto *Quercus* sp., leg. Bellò (BEL); 2♀♀, idem, 23.VI.07, leg. Bellò (BEL); 4 females, Sicilia, Messina, Peloritani, Bosco di Malabotta, 1300 m, vaglio *Fagus*, 24.IV.2006, leg. Baviera (BAV, BEL); 6 females, I, Sicilia, Messina, Floresta, S. Giacomo, vaglio lettiera di *Quercus*, 29 VI '10, leg. Baviera (BAV, BEL), 2 females, I, Sicilia, Messina, Floresta, S. Giacomo, vaglio lettiera di *Quercus*, 21 VII 2010, N 37°57.19'1, E 014° 55.06'4, leg. Baviera C. (BAV, BEL). Types are 30 females, genitalia of 6 were studied and of them molecular preparation was made.

**Other material:** Waiting for more detailed morphological and molecular studies, we consider the additional 105 females (genitalia of 6 of them studied) as belonging to this species. They came from the following localities: Castelvetrano, Vallone Zangara (BEL; PIE); Ficuzza (ANG, BEL, DOD, FOR, HOF, LEO, LUI, MAN, SOL, STE, VIT); Ficuzza loc. Alpe Cucco (BEL); Ficuzza loc. Bosco Fanuso (BEL); Madonie loc. Ortaggi (BAV, BEL); Marneo, Bosco Cappelliero (BEL, PIE); Pioppo f. Oretto (BEL, PIE); Rocca Busambra (BEL, PIE); sine patria (RAG).

**Holotype** female. Length: 4.85 mm. Robust, oval-shaped, elytra longer than wide. Dorsal vestiture of imbricate, earth-brown and brown scales and almost erect brown rather thin setae; paler small markings are on disc of both elytra and pronotum.

Rostrum subquadrate, sides converging towards apex. Epistoma concave with bulging margins; pterygia inconspicuous; clypeus in front wider than at base, with a longitudinal depression not continuing that on frons. Eyes slightly convex. Antennal scape just slightly more robust than funicle, slightly curved and progressively thickening towards apex; first 4 funicular segments with clubbed setae; first segment as long as than the combined length of the following two, second twice as long as third, segments 4–7 pearl-shaped; club elongate, fusiform and with the first segment widely conical.

Pronotum slightly transverse (length: 1.00 mm, width: 1.20 mm), sides sinuate, disc with punctures usually hidden by the scales.

Elytra oval (length: 3.00 mm, width: 2.00 mm), disc slightly convex, humeri short, round and slightly prominent. Striae inconspicuous, catenulate, interstriae feebly convex.

Legs quite short and robust; femora clubbed, edentate; tibiae short, almost straight, external margin of protibiae blunt, internal one devoid of spines; protarsi short and robust, third joint shortly bilobed, onychium curved, claws short and fused at base.

Spiculum ventrale: see Fig. 87; spermatheca: see Fig. 101.

**Paratypes:** Only females. Specimens of Castiglione are bigger (mm 4.20–5.00) of Malabotta ones (mm 3.70–4.20). No significant differences were observed between the holotype and paratypes. Length: 3.70–5.00 mm.

**Distribution:** Northern and central Sicily.

**Etymology:** Named after the hedgehog (*Erinaceus europaeus* L., 1758) in reference to the erect thin setae on the dorsal surface.

**Ecology:** This species prefers cool shadowy places, and has been found sifting under *Fagus* sp., *Olea* sp., *Rubus* sp., *Quercus* sp., *Fraxinus* sp., *Smilax* sp. Adults occur in spring and/or autumn, according to the elevation, with diapause in summer or in winter. *Pseudomeira erinacea* is a parthenogenetic species collected at Castiglione di Sicily together with *P. vitalei*; at Malabotta, Marineo and Ficuzza with *Heteromeira neapolitana*; at Pioppo with *Dolichomeira dubia* Pierotti & Bellò, 1994 and at Castelvetrano with *Dolichomeira* sp..

**Reproduction:** Parthenogenetic.

**Notes:** Only detailed morphological, ecological and molecular studies have allowed for the recognition of this cryptic species, incorrectly indicated from some localities as *P. solarii* by Péricart (1963) and Pierotti & Bellò (1994).

### *Pseudomeira natalii* sp. n.

(Figs. 19, 20, 45, 46, 60, 72, 88, 102)

*Pseudomeira nebrodensis* Pierotti, 2009: 481 (pars).

**Diagnosis:** Small to middle-sized (3.40–4.80 mm), oval. Epistoma impressed, clypeus almost flat and longitudinally impressed in middle. Elytra clothed by brown scales and rather robust elongate almost recumbent setae, here and there both paler. Apical third of aedeagus sub-triangular, apex broadly rounded.

**Type series:** Holotype male (BEL) with the following labels: "Sicilia, Messina, San Fratello 375 m, 21.X.06 leg. Bellò" [white, printed], [transparent label with genitalia in DHMF], "N 38°02.512" W 014°34.997" [white, printed], "coll. Cesare Bellò" [green, printed]; "*Pseudomeira natalii* sp. n., Holotype, det. Bellò 2010" [red, partly printed]. Paratypes: 3 males and 3 females, I, Sicilia, Messina, San Fratello, vaglio *Olea*, 21 IV 2010, leg. Bellò, (BAV, BEL); 1 female, I, Sicilia, ME, Nebrodi, San Fratello, 365 m, vaglio *Olea*, 26.XI.09, N 38°02.514" E 014°35.000", legg. Bellò & Chemello, (BEL); 4 males and 3 females, I, Sicilia, ME, San Fratello, 375 m, vaglio *Olea*, 23.IV.06, N 38°02.513" E 014°34.996" leg. Bellò, (BEL); 1 male and 1 female, S. Fratello, Messina, 16.VII.88, vaglio *Quercus* sp., leg. Bellò, (BEL); S. Fratello (ME) 16-V-07 leg. Pierotti, (PIE); 5 male and 7 females, I, Sic., ME, San Fratello, 400 m, vaglio *Olea*, N 38°02.513" E 014°35.009" 05. IV. 2011, leg. Bellò (BEL). There are 29 specimens (14 males and 15 females), genitalia of 11 specimens were studied and of 1 female molecular preparation was made.

**Holotype** male. Length: 3.40 mm. Robust, oval-shaped, elytra slightly longer than wide. Dorsal vestiture of largely overlapping, brown scales and almost recumbent brown setae rather elongate and widening at apex; paler small markings are on disc of both elytra and pronotum.

Rostrum transverse, sides weakly converging towards apex. Epistoma concave with slightly bulging margins; pterygia moderate; clypeus in front as wide as base, with a longitudinal depression usually continuing that on frons.

Eyes slightly convex. Antennal scape more robust than funicle, slightly curved and progressively thickening towards apex; first 5 funicular segments with clubbed setae; first segment as long as than the combined length of the following two, second twice as long as third, segments 4–7 pearl-shaped; club robust, shortly fusiform and with the first segment widely conical.

Pronotum slightly transverse (length: 0.75 mm, width: 0.83 mm), sides sinuate, disc with punctures usually hidden by the scales.

Elytra oval (length: 2.00 mm, width: 1.40 mm), disc slightly convex, humeri short, round and slightly prominent. Striae inconspicuous, catenulate, interstriae feebly convex.

Legs quite short and robust; femora clubbed, edentate; tibiae short, almost straight, external margin of protibiae shortly arcuate, internal one devoid of spines but with apical mucro; protarsi short and robust, third joint bilobed, onychium curved, claws fused at base.

Aedeagus: see Figs. 60, 72. Spiculum ventrale: see Fig. 88; spermatheca: see Fig. 102.

**Paratypes:** Males are almost identical to the holotype; females are on average larger, more elongate, with a more transverse pronotum and antennae, and less robust legs. Length: 3.40–4.80 mm.

**Distribution:** Known only from the type locality.

**Etymology:** The species is named after Simone Natali who kindly helped us in writing this and other notes.

**Ecology:** This species is collected, often together with *P. nebrodensis*, by sifting leaf-litter below *Olea europaea* L var. *sylvestris* Brok. and *Quercus* sp.. Adults in spring and autumn.

**Reproduction:** Amphigonic.

**Notes:** The figures of the aedeagus and internal sac by Pierotti (2009) are those of this species and not of *P. nebrodensis* as wrongly stated by Pierotti, since *P. nebrodensis* is actually a parthenogenetic species (see above).

#### *Pseudomeira trinacriae* sp. n.

(Figs. 21, 22, 47, 48, 61, 73, 89, 103)

**Diagnosis:** Small (3.00–3.75 mm), elongate-oval. Epistoma shallowly impressed, clypeus longitudinally impressed in middle; frons wide and almost flat. Elytra almost flat dorsally, humeri weakly developed, clothed by just slightly imbricate brown scales and short nearly almost recumbent pale setae, here and there scales paler. Aedeagus with rounded apex.

**Type series:** Holotype male (BEL) with the following labels: [transparent label with genitalia in DHMF], "Palermo, Altavilla Milicia, Capo Grosso, 24.V.97, leg. Bellò" [white, printed], "coll. Cesare Bellò" [green, printed]; "*Pseudomeira trinacriae* sp. n., Holotype, det. Bellò 2010" [red, partly printed]. Paratypes: 14 males and 16 females, Palermo, Altavilla Milicia, Capo Grosso, 24.V.97, leg. Bellò (BAV, BEL); 10 males and 12 females, ibidem, leg. Pierotti (PIE); 1 male and 1 female, Palermo, Altavilla Milicia, m.70, N 38°01'473", E 013°35'566", 28.XI.2009, leg. Bellò (BEL). Types are 25 males and 30 females, genitalia of 4 were studied and molecular data from 1 male and 1 female were obtained.

**Holotype** male. Length: 3.15 mm. Elongate oval, elytral sides almost straight. Dorsal vestiture of overlapping, earth-brown scales and short almost recumbent pale setae slightly widening towards apex; paler small markings of scales are on disc of both elytra and pronotum.

Rostrum approximately as long as wide, sited converging towards apex. Epistoma and dorsal plate inconspicuous; pterygia hardly noticeable; clypeus with a longitudinal depression not continuing on frons. Eyes round, small, nearly hemispherical. Antennal scape more robust than funicle, slightly curved and progressively thickening towards apex; first 5 funicular segments with clubbed setae; first segment as long as than the combined length of the following two, second twice as long as third, segments 4–7 pearl-shaped; club robust, shortly fusiform and with the first segment widely conical. Antennae short and robust; scape hardly more robust than funicle, curved al basal third and progressively thickening towards apex; first 5 funicular segments with clubbed setae; first segment as long as the combined length of the following two, second twice as long as third, segments 4–7 pearl-shaped; club shortly fusiform and with the first segment widely conical.

Pronotum slightly transverse (length: 0.75 mm, width: 0.83 mm), sides sinuate, disc with punctures usually hidden by the scales.

Elytra elongate oval (length: 1.85 mm, width: 1.25 mm), disc almost flat, humeri short, round and slightly prominent. Striae punctured, catenulate, interstriae feebly convex.

Legs short and robust; femora slightly clubbed, edentate; tibiae slightly curved, external margin of protibiae blunt, internal one devoid of spines but with apical mucro; protarsi short and robust, third joint shortly bilobed, onychium short and curved, claws short and fused at base.

Aedeagus: see Figs. 61, 73. Spiculum ventrale: see Fig. 89; spermatheca: see Fig. 103.

**Paratypes:** Males are almost identical to the holotype; females differ from males by their usually larger size, more elongate shape, and thinner antennae. Length: mm 3.00–3.75.

**Distribution:** This species is only known from the type locality.

**Etymology:** The species name is from *Trinacria*, the ancient name of Sicily.

**Ecology:** Adults have been sifted from leaf-litter of a degraded fired bushy fields with *Chamaerops humilis* L., *Erica* sp., *Vitex agnus castus* L., and other Mediterranean plants. Adults appear in late spring (some of them collected at the end of May still had the deciduous mandibular cusps), probably aestivate and reappear, less common, in autumn.

**Reproduction:** Amphigonic.

### The *obscura* species group

**Diagnosis:** Body more or less globose, disc of elytra convex.

#### *Pseudomeira obscura* (Solari & Solari, 1907)

(Figs. 23, 49, 62, 74)

*Peritelus obscurus* Solari & Solari, 1907: 117.

*Peritelus parvulus* Seidlitz sensu Desbrochers, 1871: Bertolini, 1899: 89; Vitale, 1900a: 19; Vitale, 1901: 426; Vitale, 1906b: 29.

*Peritelus (Peritelus) obscurus* : Luigioni, 1929: 872.

*Peritelus (Meira) obscurus* : Porta, 1932: 64.

*Peritelus (Pseudomeira) obscurus* : Lona, 1937: 264.

*Pseudomeira obscura* (Solari & Solari) : Pierotti & Bellò, 1994: 111; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1998: 105; Sparacio, 1999: 138; Colonnelli, 2003: 48; Osella et al., 2005; Abbazzi & Maggini, 2009: 62.

**Type locality:** Sicily, Messina (see below).

**Diagnosis:** Small (2.6–3.8 mm), globose, elytral disc gibbous anteriorly. Epistoma impressed, clypeus flat and longitudinally impressed in middle. Elytra clothed with earth-brown or silvery scales and short almost almost recumbent setae with moderately widening apex. Aedeagus with quite rounded apex.

**Description:** Body globose. Dorsal vestiture of earth-brown scales, usually forming two longitudinal darker stripes on each side of pronotum and a patch around scutellum, here and there paler, sometimes silvery, and of short setae with moderately widening apex which are recumbent on frons and pronotum and more or less suberect on elytra.

Rostrum strongly transverse, sided hardly (♀) or distinctly (♂) converging towards apex. Epistoma concave with bulging edges; pterygia not or just slightly protruding; clypeus subrectangular and with a longitudinal depression. Eyes nearly hemispherical, slightly protruding from head. Antennae quite robust; basal half of scape not or weakly thickening; second funicular segment as long as or shorter than the combined length of the following two, segments 3–7 pearl-shaped; club rather elongate and with the first segment widely conical.

Pronotum more (♂) or less (♀) transverse, anterior margin as wide as basal one, sides weakly sinuate, disc with obvious dense punctures.

Elytra oval, globose, humeri wanting. Striae punctured, interstriae feebly convex.

Legs moderately robust; external margin of protibiae straight, shortly rounded at apex.

Aedeagus: see Figs. 62, 74.

**Lectotype:** Solari & Solari (1907) described this species from: “Sicilia (Messina, coll. Vitale); Calabria (Santa Eufemia, Aspromonte, coll. Paganetti); Salernitano (Vallo di Lucania, coll. nostra)”. In accordance with the priority criterion, according to the International Code of Zoological Nomenclature, considering that all Palaearctic Peritelini are wingless species consisting of populations which in some cases are now being separated as different taxa, it seems suitable to select lectotypes of with more than one type locality species to avoid possible future misinterpre-

tations. We thus checked the Solari and the Vitale collections where we found 27 type specimens (males only from Messina) from which we select here a male lectotype (SOL) labeled as follows: [genitalia glued on a white label], "Messina, F. Vitale" [white, printed], "co-Typus" [white, partly printed], "Pseudomeira obscura (A. & F. Solari, 1907), Lectotypus, det. Bellò 2010" [red, handwritten], "foto Bellò 2011" [yellow, handwritten].

**Paralectotype:** Two specimens (VIT), both with "Messina, F. Vitale" [white, printed], "Peritelus obscurus, det. F. Solari" [white, partly printed], "Pseudomeira obscura Sol., det. C. Pesarini 2001" [white, printed], "Pseudomeira obscura (A. & F. Solari, 1907), Paralectotypus, det. Bellò 2009" [white, printed], "Pseudomeira obscura (A. & F. Solari, 1907), Paralectotypus, det. Bellò 2010" [red, handwritten]. One paralectotype (VIT), with "Messina, F. Vitale" [white, printed], "Peritelus obscurus nob.-cotyp" [white, handwritten], "Pseudomeira obscura (A. & F. Solari, 1907), Paralectotypus, det. Bellò 2010" [red, handwritten], "Pseudomeira obscurella Bellò & Pierotti, det. C. Bellò 2010"; this is a specimen of *Pseudomeira obscurella* Bellò & Pierotti, 1994. Fifteen paralectotype (SOL), all with "Calabria, S.ta Eufemia" [white, printed], "Paganetti" [white, printed], "co-typus" [white, partly printed], "Pseudomeira obscura (A. & F. Solari, 1907), Paralectotypus, det. Bellò 2010" [red, handwritten]. Five paralectotype (SOL), all with "Calabria, Aspromonte" [white, printed], "Paganetti" [white, printed], "co-typus" [white, partly printed], "Pseudomeira obscura (A. & F. Solari, 1907), Paralectotypus, det. Bellò 2010" [red, handwritten]. One paralectotype (SOL) with "Vallo Lucano, Sambiase, V 1902, Solari" [white, partly printed], 2 co-typus" [white, partly printed], "Pseudomeira obscura (A. & F. Solari, 1907), Paralectotypus, det. Bellò 2010" [red, handwritten]. Two paralectotype (SOL), both with "Sicilia, Messina, Calamarà, 31 1903, Vitale" [white, partly printed], "co-typus" [white, partly printed], "Pseudomeira obscura (A. & F. Solari, 1907), Paralectotypus, det. Bellò 2010" [red, handwritten]. With the present selections, Messina becomes the type locality of this species.

**Distribution:** Central and southern Apennines, Sicily.

**Material from Sicily:** A total of 24 specimens were examined; genitalia of 4 were studied.

**Localities in Sicily:** Messina (BIN, DOD, HOF, LUI, SOL, VIT); Calamarà (SOL, VIT).

**Ecology:** In spite of our efforts, we were unable to collect this species in the surroundings of Messina, Sicily, although we found it innearby Aspromonte, Calabria sifting leaf-litter taken under *Fagus sylvatica* L., *Castanea sativa* Miller, *Astragalus* sp., and turning stones in the nearby meadows.

**Reproduction:** Amphigonic.

**Notes:** Specimens under this name from other Sicilian localities in RAG, SOL and VIT, are actually *P. obscurella* Pierotti & Bellò, a parthenogenetic species described subsequently.

#### *Pseudomeira obscurella* Pierotti & Bellò, 1994

(Figs. 24, 50, 90, 104)

*Pseudomeira obscurella* Pierotti & Bellò, 1994: 107; Pierotti & Bellò, 1998: 106; Colonnelli, 2003: 48; Osella et al., 2005; Abbazzi & Maggini, 2009: 62.

**Type locality:** Apulia, Gargano, Cagnano Varano.

**Diagnosis:** Small (2.0–2.8 mm), rather globose. Epistoma impressed, clypeus flat and longitudinally impressed in middle. Elytra convex on anterior part, clothed with grey scales and short rather robust, suberect setae.

**Description:** See Pierotti & Bellò (1994).

**Distribution:** Central and southern Apennines and Sicily.

**Material from Sicily:** We examined a total of 67 specimens, including the holotype in PIE. Genitalia of 4 were studied, and molecular data were obtained for 11.

**Localities in Sicily:** Messina: Peloritani: Calamarà (SOL), Campo Italia (BEL), Castanea (SOL), Colla (SOL, RAG), Cudduttà (VIT), Dinnamare (BAV, BEL), Portella Armacera (BAV, BEL), Portella Croce Cumia (BAV, BEL), Portella S. Rizzo (BAV), Malabotta (BAV, BEL, OSE, PIE), Scala (RAG), Tono (BAV, BEL); Nebrodi: M. Soro (STU); Catania: Maniace (BEL), M. Etna (OSE), M. Maletto (BAV, OSE, PIE), Piano Provenzana (BAV, BEL), Linguaglossa (GER, STU), Randazzo (BEL); Siracusa: Sortino (STU); Palermo: Alcara Li Fusi (BEL), Castellana Sicula (STU), Castelbuono (STU), Petralia Soprana (GER), Polizzi Generosa (BEL), Rocca Palumba (BEL).

**Ecology:** This is primarily a montane species, with adults in spring, collected in Sicily sifting leaf-litter taken under *Fagus* sp., *Olea* sp., *Quercus* sp., *Castanea* sp., *Erica* sp., *Viola aetnensis* P., or with pitfall traps. One of us (Baviera) also collected some adults sweeping low vegetation.

**Reproduction:** Parthenogenetic.

**Notes:** Our ongoing molecular studies may perhaps reveal that this parthenogenetic species with an unusual wide range is a complex of sibling ones. These are the first records for Sicily.

### The *cossyrica* species group

#### *Pseudomeira cossyrica* Pierotti & Bellò, 1994

(Figs. 25, 51, 63, 75)

*Pseudomeira cossyrica* Pierotti & Bellò, 1994: 107; Osella & Riti, 1995: 618; Pierotti & Bellò, 1998: 106; Sparacio, 1999: 138; Colonnelli, 2003: 48; Abbazzi & Maggini, 2009: 61.

*Pseudomeira paganettii?* Solari: Liebmann, 1962: 5.

*Pseudomeira crassirostris* Solari: Magnano & Osella, 1973: 632.

**Type locality:** Pantelleria Island, Montagna Grande.

**Diagnosis:** Small (3.0–4.0 mm) globose-elongate. Epistoma impressed, clypeus flat and rather shallowly longitudinally impressed in middle. Elytra clothed with coppery-golden scales just slightly imbricate and long thin almost recumbent setae. Aedeagus with subtrapezoidal apex.

**Description:** See Pierotti & Bellò (1994).

**Distribution:** Pantelleria Island; known only from the type locality.

**Material:** A total of 69 specimens, including the holotype (PIE) and paratypes (BEL, OSE, PIE) were examined.

**Localities:** Pantelleria (HOF): Montagna Grande (BEL, OSE, PIE).

**Ecology:** Adults have been collected at the end of June in *Pinus* undergrowth and under Mediterranean shrubs. Possibly the phenology is similar to other *Pseudomeira*, namely with adults aestivating and reappearing in autumn.

**Reproduction:** Amphigonic.

#### *Pseudomeira aeolica* Bellò, Pesarini & Pierotti, 1997

(Figs. 26, 52, 64, 76)

*Pseudomeira aeolica* Bellò et al., 1997: 69; Lo Cascio & Pasta, 2004: 464; Osella et al., 2005; Abbazzi & Maggini, 2009: 61.

*Pseudomeira vitalei* : Magnano & Osella, 1973: 105.

**Type locality:** Salina Island, Malfa.

**Diagnosis:** Small to middle-sized (3.0–4.1 mm) globose-elongate. Epistoma impressed, clypeus flat and longitudinally impressed in middle. Elytra clothed with golden or silvery scales just slightly imbricate and long thin suberect setae. Apex of aedeagus broadly rounded.

**Description:** See Bellò, Pesarini & Pierotti (1997).

**Distribution:** Aeolian Islands.

**Material:** A total of 112 specimens, included the holotype in MMI. Genitalia of 4 were studied.

**Localities:** Salina Island: Malfa (BEL, OSE, PIE), Val di Chiesa (OSE); Lipari Island (BEL, MMI, PIE, STE); Alicudi Island (BEL, MMI, PES, PIE); Filicudi Island (BAV, BEL); Stromboli Island (BAV, BEL).

**Ecology:** One of us (Bellò) collected several adults at the beginning of summer sifting under *Artemisia* sp. and *Cistus* sp., in spite of temperatures around 40°C.

**Reproduction:** Amphigonic.

**Notes:** Although some divergence exists between specimens collected in different islands of the Aeolian archipelago, at the moment we consider all of them as belonging to the same species waiting the collection of more abundant material.

## Species wrongly recorded from Sicily

### *Pseudomeira flavipennis sicula* (Seidlitz, 1865)

*Peritelus (Peritelus) subdepressus* var. *siculus* : Seidlitz, 1865: 318; Marseul, 1872: 85; Stierlin, 1883: 593; Heyden et alii, 1883: 151; Vitale, 1892: 225.  
*Peritelus (Curculio) subdepressus* var. *siculus* Bertolini, 1872: 168.  
*Peritelus flavipennis* var. *siculus* Vitale, 1890: 38; Bertolini, 1899: 89; Vitale, 1900a: 19; Luigioni, 1929: 872; Porta, 1932: 61.  
*Pseudomeira flavipennis* ssp. *siculus* (sic !): Abbazzi & Osella, 1992: 304  
*Pseudomeira flavipennis* f. *sicula*: Abbazzi et al., 1995: 23.  
*Pseudomeira flavipennis* : Pierotti & Bellò, 1997, 164; Pierotti & Bellò, 1998: 105.  
*Pseudomeira flavipennis sicula* : Sparacio, 1999: 138; Osella et al., 2005.  
*Pseudomeira sicula* : Colonnelli, 2003: 49; Abbazzi & Maggini, 2009: 62.

The nominotypic subspecies occurs in southern France (Hérault, Gard, Bouches-du-Rhône, Vaucluse, Ardèche, Alpes-Maritimes, Drôme, Aude, Ariège, Hautes-Pyrénées, Pyrénées-Orientales, Lozère, Basses-Alpes) and in north-western Italy (Piedmont, Asti). The subspecies *sicula*, was described as a "variety" from Sicily without more precise locality (Seidlitz 1865). No type can be found in either FAI or SEI, whereas in TOU there are two examples labeled "Sicile", which are absolutely identical to those from France. Considering that this characteristic species has never (re)collected in Sicily, it is almost sure that the mentioned examples were mislabeled. We are thus confident in excluding *P. flavipennis* from the Sicilian fauna, and in establishing the following synonymy: *Pseudomeira flavipennis* (Jacquin du Val, 1852) [= *Peritelus flavipennis* var. *siculus* Seidlitz, 1865, syn. rev.].

### *Pseudomeira parvula* (Seidlitz, 1865)

*Peritelus parvulus* Seidlitz, 1865: 327, 328; Seidlitz, 1866: 55, 56; Desbrochers, 1871: 347; Stierlin, 1883: 593; Bargagli, 1884: 49; Vitale, 1892: 219; Vitale, 1900a: 19; Vitale, 1901: 426; Vitale, 1904: 13; Vitale, 1906b: 85; Solari & Solari, 1907: 117; Luigioni, 1929: 872.  
*Peritelus (Curculio) parvulus* : Bertolini, 1872: 168.  
*Peritelus italicus* Marseul, 1872: 88; Bertolini, 1899: 89.  
*Peritelus (Peritelus) parvulus* : Seidlitz, 1865: 291; Stierlin, 1883: 594; Vitale, 1892: 225; Porta, 1932: 61.  
*Pseudomeira parvula* : Solari, 1955: 44; Abbazzi & Osella, 1992: 305; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1995: 523; Pierotti & Bellò, 1998: 105; Osella et al., 2005; Abbazzi & Maggini, 2009: 62.

This species is indicated as occurring in Sicily most probably based on some specimens in VIT identified as *Peritelus parvulus*, partly from Messina, and partly from Monte Ciccio. However, after studying the Vitale collection, we discovered that those from the first locality are *P. obscura*, and those from the second are *P. obscurella*. Consequently *P. parvula*, known from Piedmont, Lombardy, Liguria and Tuscany, is excluded from the Sicilian fauna.

### *Pseudomeira grenieri* (Seidlitz, 1865)

*Peritelus (Peritelus) grenieri* Seidlitz, 1865: 291, 332–333, Seidlitz, 1866: 60, 61; Stierlin, 1883: 591; Lona, 1937: 257.  
*Peritelus (Curculio) grenieri* : Bertolini, 1872: 168.  
*Peritelus grenieri* : Vitale, 1890: 38; Vitale, 1900a: 19; Sparacio, 1999: 136; Abbazzi & Osella, 1992: 303; Abbazzi et al., 1995: 23; Colonnelli, 2003: 48; Abbazzi & Maggini, 2009: 59.  
*Peritelus (Peritelus) grenieri* : Heyden et alii, 1883: 151; Vitale, 1892: 225; Porta, 1932: 62.  
*Pseudomeira grenieri* : Pierotti & Bellò, 1994: 290; Pierotti & Bellò, 1995: 526; Pierotti & Bellò, 1997, 164; Pierotti & Bellò, 1998: 105.  
*Pseudomeira grenieri* : Pierotti et al., 2010: 23.

This species occurs in southwestern France (Aude, Pyrénées-Orientales) and in northwestern Spain (Catalunia), so that the records (Bertolini, 1872) from Sicily are surely due to mislabeling.

### ***Pseudomeira insularis* (Desbrochers, 1871)**

*Peritelus insularis* Desbrochers, 1871: 346; Stierlin, 1883: 193; Vitale, 1900a: 19; Vitale, 1900b: 125; Vitale, 1901: 426; Vitale, 1902: 4; Vitale, 1904: 13; Vitale, 1906b: 85.  
*Peritelus (Curculio) insularis* : Bertolini, 1872: 168.  
*Peritelus curticollis* Marseul : Bertolini, 1899: 89.  
*Peritelus (Peritelus) insularis* : Vitale, 1892: 225; Luigioni, 1929: 873; Porta, 1932: 61.  
*Peritelus (Pseudomeira) insularis* : Lona, 1937: 263; Hoffmann, 1950: 189; Péricart & Tempère, 1972: 9.  
*Pseudomeira insularis* : Solari, 1955: 54; Gregori & Osella, 1989: 412; Pierotti & Bellò, 1995: 530; Pierotti & Bellò, 1998: 105; Pierotti & Bellò, 2001: 22.

Records by Vitale from the surroundings of Messina (Monte Ciccia, Calamarà) are due to misidentifications, as shown by the revision of the Vitale collection by Baviera & Bellò (in preparation). This species is known only from Corsica.

### ***Pseudomeira muscorum* (Desbrochers, 1871)**

*Peritelus muscorum* Desbrochers, 1871: 347; Vitale, 1900a: 19; Vitale, 1904: 13.  
*Peritelus (Curculio) muscorum* : Bertolini, 1872: 168.  
*Peritelus muscicola* Desbrochers : Bertolini, 1899: 89.  
*Peritelus (Peritelus) muscorum* var. *muscicola* : Vitale, 1892: 225.  
*Peritelus (Peritelus) muscorum* : Luigioni, 1929: 872; Porta, 1932: 62.  
*Peritelus (Pseudomeira) muscorum* : Lona, 1937: 263; Hoffmann, 1950: 186, 187; Péricart & Tempère, 1972: 9.  
*Pseudomeira muscorum* : Solari, 1955: 55; Pierotti & Bellò, 1995: 530; Pierotti & Bellò, 1998: 105; Pierotti & Bellò, 2001: 21.

This species is known only from Sardinia. Records from Sicily are due to misidentification.

### ***Pseudomeira lostiae* (Desbrochers, 1892)**

*Peritelus lostiae* Desbrochers, 1892: 88; Bertolini, 1899: 89.  
*Peritelus (Peritelus) lostiae* : Luigioni, 1929: 872; Vitale, 1903b: 8.  
*Peritelus (Pseudomeira) lostiae* : Porta, 1932: 64; Lona, 1937: 263.  
*Pseudomeira lostiae* : Abbazzi & Osella, 1992: 305; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1995: 530; Bellò et al., 1997: 71; Pierotti & Bellò, 1998: 105; Pierotti & Bellò, 2001: 20; Abbazzi & Maggini, 2009: 62.

This species is distributed only in Sardinia and Corsica. No specimens from Sicily are actually known.

### ***Pseudomeira crassirostris* F. Solari, 1955**

*Pseudomeira crassirostris* Solari, 1955: 48; Porta, 1959: 273; Pierotti & Bellò, 1994: 107; Abbazzi et al., 1995: 23; Pierotti & Bellò, 1995: 530; Osella & Riti, 1995: 618; Bellò et al., 1997: 69; Pierotti & Bellò, 1998: 106; Abbazzi & Maggini, 2009: 61.  
*Pseudomeira crassicornis* (sic!) : Abbazzi & Osella, 1992: 304.

Sicilian records refer to the subsequently described *P. aeolica*. True *P. crassirostris* occurs only in Campania.

### **Key to Sicilian genera of Peritelini**

1. Claws free . . . . .	<i>Simo</i> Dejan, 1821
— Claws connate . . . . .	2
2. Frons not separated from clypeus by transverse groove (Fig. 105, 18 spp.) . . . . .	<i>Pseudomeira</i> Stierlin, 1881
— Frons separated from clypeus by transverse groove . . . . .	3
3. Epistoma inconspicuous or wanting, eyes reduced (2 spp.) . . . . .	<i>Dolichomeira</i> Solari, 1955
— Epistoma obvious, eyes normal (3 spp.) . . . . .	<i>Heteromeira</i> Solari, 1955

## Key to Sicilian *Pseudomeira*

1. Body more or less globose, disc of elytra convex ..... 2
- Body oval or elongate oval, disc of elytra almost flat ..... 5
2. Body globose (*obscura* group) (Figs. 23, 24, 49, 50) ..... 3
- Body globose-elongate (*cossyrica* group) (Figs. 25, 26, 51, 52) ..... 4
3. Elytral setae thicker, scales smaller and obviously imbricate. Amphigonic ..... *obscura*
- Elytral setae thinner, scales larger and not or hardly imbricate. Parthenogenetic ..... *obscurella*
4. Outer margin of protibiae near the apex shortly blunt, eyes almost hemispherical ..... *cossyrica*
- Outer margin of protibiae near the apex widely blunt, eyes quite flat ..... *aeolica*
5. Epistoma always obviously concave with bulging edges (*vitalei* group) ..... 6
- Epistoma not or weakly concave without bulging edges (*exigua* group) ..... 13
6. Larger (mm 3.70–5.00), oval, elytral setae erect and thin. Parthenogenetic ..... *erinacea* sp. n.
- On average smaller (mm 2.8–4.5), elytral setae rather thick, suberect or almost recumbent. Amphigonic ..... 7
7. Body oval (Figs. 9, 10, 11, 12, 14, 15, 19, 20) ..... 8
- Body oval elongate (Figs. 13, 16, 17, 21, 22) ..... 11
8. Elytral setae almost recumbent ..... 9
- Elytral setae suberect ..... 10
9. Body oval. Apical third of aedeagus narrowly ogival, apex lanceolate (Fig. 67). Spermatheca as in Fig. 97 ..... *vitalei*
- Body less oval. Apical third of aedeagus sub-triangular, apex broadly rounded (Fig. 72). Spermatheca as in Fig. 102 ..... *natalii* sp. n.
10. Elytral setae less suberect. Apical third of aedeagus sub-triangular, apex narrowly rounded (Fig. 68). Spermatheca as in Fig. 98 ..... *reitteri*
- Elytral setae more suberect. Apical third of aedeagus broadly ogival, apex sharp (Fig. 70). Spermatheca as in Fig. 99 ..... *solarii*
11. Humeri rounded (Fig. 21) ..... 12
- Humeri angular (Fig. 16) ..... *osellai*
12. Elytral setae suberect. Apex of aedeagus shortly blunt (Fig. 69) ..... *doderoi*
- Elytral setae almost recumbent. Apex of aedeagus broadly rounded (Fig. 72) ..... *trinacriae* sp. n.
13. Body oval-elongate ..... 14
- Body elongate ..... 17
14. Elytra with spatulate setae at least on apical declivity ..... 15
- Elytra with setae widening towards apex ..... 16
15. Elytral setae more spatulate and more recumbent. Amphigonic ..... *himerensis* sp. n.
- Elytral setae less spatulate and less recumbent ..... *petrensis* sp. n.
16. Elytral setae just slightly widening towards apex and suberect, humeri rounded ..... *ficuzzensis* sp. n.
17. Elytra with more recumbent and spatulate setae at least on apical declivity ..... *pfisteri*
- Elytra with setae less recumbent and widening towards apex ..... 18
18. Clypeus gibbous, epistoma wanting. Amphigonic ..... *exigua*
- Clypeus flat, epistoma slightly defined. Parthenogenetic ..... *nebrodensis*

## Checklist of Sicilian *Pseudomeira*

### *exigua* group

*exigua* (Stierlin, 1861) Palermo (loc. typ. Monte Pellegrino)  
*pfisteri* (Stierlin, 1864) Palermo (loc. typ. Monte Pellegrino)  
*nebrodensis* Pierotti, 2009 Messina Monti Nebrodi (loc. typ. San Fratello)  
*ficuzzensis* sp. n. Palermo (loc. typ. Bosco Ficuzza, Crocefisso)  
*himerensis* sp. n. Palermo (loc. typ. Termini Imerese)  
*petrensis* sp. n. Palermo Madonie (loc. typ. Piano Battaglietta)  
\*

### *vitalei* group

*vitalei* (Desbrochers, 1892) Messina Peloritani (loc. typ. Castanea)  
*reitteri* (Vitale, 1903) Messina Peloritani (loc. typ. Castroreale)  
*doderoi* F. Solari, 1955 Iblei (loc. typ. Pachino)

*solarii* Péricart, 1963 Palermo, Messina (loc. typ. Gibilmanna)  
*osellai* Pierotti & Bellò, 1994 Iblei (loc. typ. Bosco Bauli)  
*erinacea* sp. n. Sicily (loc. typ. Castiglione di Sicilia)  
*natalii* sp. n. Messina Nebrodi (loc. typ. San Fratello)  
*trinacriae* sp. n. Palermo (loc. typ. Altavilla Milicia)  
\*

### ***obscura* group**

*obscura* (Solari & Solari, 1907) Southern Italy, Sicily (loc. typ. Messina)  
*obscurella* Pierotti & Bellò, 1994 Southern Italy, central and northern Sicily (loc. typ. Gargano)  
\*

### ***cossyrica* group**

*cossyrica* Pierotti & Bellò, 1994 Pantelleria (loc. typ. Montagna Grande)  
*aeolica* Bellò, Pesarini & Pierotti, 1997 Aeolian Islands (loc. typ. Isola di Salina, Malfa)

## **Conclusions**

Although our field surveys of Sicilian *Pseudomeira* are still ongoing, we were able to separate 18 species, 16 of which are endemic. Twelve of them are amphigonic and 6 are parthenogenetic. On one hand our study increased the number of species known from Sicily, on the other it proved that the indications from Sicily of *P. parvula*, *P. grenierii*, *P. insularis*, *P. muscorum*, *P. lostiae*, and *P. crassirostris* were due to misidentifications of mislabeling. *P. flavipennis sicula* is a synonym of *P. flavipennis*, a species only occurring in southern France and north-western Italy and not in Sicily.

Sicily and the lesser Sicilian islands host a number of species (18 species) significantly higher not only of other large Mediterranean islands, like the Balearic Islands (3 species), Corsica (6 species), Sardinia and lesser islands (12 species), but also higher than that of the nearby continental Calabria (7 species) and Tunisia (5 species). A possibly explanation could be found in a recently study on *Pimelia* Fabricius, 1775 (Tenebrionidae, Coleoptera) in Sicily (Stroscio et al., 2011) in which they observed a very high genetic structuring of populations that probably correlate with the biology of sedentary and flightless insects that are capable of only limited dispersal. For *Pseudomeira*, which are likely more sedentary than *Pimelia*, this higher number of species in Sicily is probably related to the complex paleogeographic history of this island. Land masses that converged to constitute Sicily probably brought different faunal elements. Thus, closely related species of the *vitalei*, *obscura* and *cossyrica* groups live in southern Italy, related species of the *obscura* group occur in Sardinia, and species of the *exigua* group are found in Tunisia. The study of Palearctic Peritelini, all apterous, can improve our knowledge about the manner in which Sicily was colonized during past ages. The presence of *Pseudomeira* can also help nature conservationists to recognize areas to preserve, as these weevils are clearly related to relatively natural and stable habitats.

## **Acknowledgements**

Our sincere thanks to Miguel Angel Alonso Zarazaga (Museo Nacional de Ciencias Naturales, Madrid, Spain), Marcello Arnone (Museo Civico di Terrasini, Palermo, Italy), Roberto Casalini (Museo Civico di Zoologia, Rome, Italy), Giulio Cuccodoro (Muséum National d'Histoire Naturelle, Geneve, Switzerland), Josef Jelínek (Narodní Muzeum v Praze, Prague), Hélène Perrin (Muséum National d'Histoire Naturelle, Paris, France), Carlo Pesarini and Fabrizio Rigato (Museo Civico di Storia Naturale, Milano, Italy), Roberto Poggi (Museo Civico di Storia Naturale "G. Doria", Genova, Italy), Giorgio Sabella (Dipartimento di Biologia Animale, Università di Catania, Italy), Lothar Zerche (Deutsches Entomologisches Institut, Berlin, Germany) and Giuseppe Lo Paro (Dipartimento di Biologia Animale ed Ecologia Marina dell'Università di Messina, Italy), for making us available all *Pseudomeira* specimens preserved in their institutions.

The following colleagues and friends gave us additional material from their private collections: Ferdinando Angelini (Francavilla Fontana, Italy), Lutz Benhe (Munchenberg, Germany), Roman Borovec (Sloupno, Czech

Republic), Christoph Germann (Hinterkappelen, Switzerland), Luigi Magnano (Poggibonsi, Italy), Giuseppe Osella (Verona, Italy), Helio Pierotti (Treviso, Italy) and Peter Stüben (Mönchengladbach, Germany).

A particular thank to Rita & Pietro Berton for graphics support, our friends Enzo Colonnelli and Giuseppe Osella who critically revised a first draft of this paper and to Bob Anderson of Canadian Museum of Nature (Ottawa, Canada) for helpful comments and stylistic improvements.

## References

Abbazzi, P., Maggini, L. (2009) Elenco sistematico-faunistico dei Curculionoidea italiani, Scolytidae e Platypodidae esclusi (Insecta, Coleoptera). *Aldrovandia*, 5, 29–216.

Abbazzi, P., Osella, G. (1992) Elenco sistematico-faunistico degli Anthribidae, Rhinomaceridae, Attelabidae, Apionidae, Brentidae, Curculionidae Italiani (Insecta, Coleoptera; Curculionidae). *Redia*, 75(2), 303–305.

Abbazzi, P., Colonnelli, E., Masutti, L., Osella, G. (1995) Coleoptera Polyphaga XVI (Curculionoidea). 68 pp. In: Minelli A., Ruffo S. & La Posta S. (eds.) *Checklist delle specie della fauna italiana*, 61. Calderini, Bologna.

Alonso-Zarazaga, M. A., Lyal, C.H.C. (1999) A world catalogue of families and genera of curculionoidea (Insecta: Coleoptera) (Excepting Scolytidae and Platypodidae). *Entomopraxis*, Barcelona, 315 pp.

Angelini, F. (1986) Coleottero fauna del Massiccio del Pollino (Basilicata-Calabria) *Entomologica*, 21, 115.

Bargagli, P. (1884) Note intorno alla biologia di alcuni coleotteri. *Bullettino Società Entomologica Italiana*, 1884, 48–49.

Baviera, C. (2007) First record of *Gonioctena* (Coleoptera Chrysomelidae, Chrysomelinae) in Sicily, with the description of *Gonioctena theae* n. sp. *Italian Journal of Zoology*, 74 (4), 389–393.

Baviera, C. (2008) Prima segnalazione del genere *Aesalus*, Fabricius, 1801 in Sicilia con descrizione di *Aesalus scarabaeoides siculus* n. ssp. (Coleoptera Lucanidae: Aesalinae). *Revue Suisse de Zoologie*, 115 (3), 585–592.

Baviera, C. (2010) *Alaocyba ientilei* n. sp. (Coleoptera: Raymondionymidae) from Maretimo (Egadi Islands). *Revue Suisse de Zoologie*, 117 (1), 1–6.

Baviera, C., Liberti, G. (2010) Dasytidae of the Egadi Archipelago (Coleoptera, Cleroidea) with description of *Danacea hierena* n. sp.. *Zootaxa*, 2351, 49–57.

Baviera, C., Magnano, L. (2010) Contribution to the knowledge of the weevil subgenus Arammichnus Gozis, genus *Otiorhynchus* Germar (Coleoptera, Curculionidae) from Sicily and the Sicilian islands. *Zootaxa*, 2432, 45–58.

Baviera, C., Bellò, C. (in preparation) - VI° Contributo alla Revisione della Collezione Coleotterologica Francesco Vitale: Coleoptera Curculionidae Peritelini.

Bellò, C., Pesarini, C., Pierotti, H. (1997) Due nuove *Pseudomeira* delle isole tirreniche minori (Coleoptera Curculionidae). *Atti della Società italiana di Scienze naturali e del Museo civico di Storia naturale di Milano*, 137 (1–2), 69–73.

Bertolini, S. (1872) *Catalogo sinonimico e topografico dei coleotteri d'Italia*. Tipografia Cenniniana, Firenze. 263 pp.

Bertolini, S. (1899) Catalogo dei coleotteri d'Italia. *Rivista Italiana di Scienze Naturali*, 1–144.

Colonnelli, E. (1974) Gli attelabidi ed i curculionidi del Massiccio del Pollino (Coleoptera). *Fragmenta Entomologica*, 10(2), 107–219.

Colonnelli, E. (2003) A revised checklist of Italian Curculionoidea (Coleoptera). *Zootaxa*, 337, 1–142.

Desbrochers des Loges, J. (1871) Description de Coléoptères nouveaux d'Europe et confins et remarque diverses. *Mittheilungen der Schweizer entomologischen Gesellschaft*, III, 1869–72 (1871), 345–348.

Desbrochers des Loges, J. (1892) Espèces inédites de curculionides de l'Ancient Monde. (Suite) - *Le Frelon*, 2(1), 1–12.

Dönges, J. (1954) Der Kopf von *Cionus scrophulariae* L. (Curculionidae). *Zoologische Jahrbücher; Abteilung Anatomie und Ontogenie der Tiere*, 74 (1), 1–188.

Gregori, L., Osella, G. (1989) Il popolamento a coleotteri Curculionidea. *Annali Museo Civico di Storia Naturale G.Doria*, Vol. LXXXVII–12, 1989, 412.

Heyden, L. von, Reitter, E., Weise, J. (1906) Catalogus Coleopterorum Europae, Caucasi et Armeniae rossicae. Ed. II. Paskau, V + 774 pp.

Hoffmann, A. (1950) Faune de France. 52. Coléoptères Curculionides (Première partie) (Avec 304 figures). *Lechevalier*, Paris, pp. 1–486.

Lona, C. (1937) Coleopterorum Catalogus auspiciis et auxilio W. Junk editus a S. Schenkling. Pars 162. *Curculionidae: Otiorrhynchinae II*. Junk, Berlin, pp. 227–412.

Liebmann, W. (1962) Ein Beitrag zur Käferfauna von Pantelleria. *Stuttgarter Beiträge zur Naturkunde aus dem Staatlichen Museum für Naturkunde in Stuttgart*, 87, 1–6.

Lo Cascio, P., Pasta, S. (2004) Il patrimonio biologico delle isole Eolie: dalla conoscenza alla conservazione. *Naturalista siciliano*, 28(1), 457, 476.

Luigioni, P. (1929) I coleotteri d'Italia. *Memorie della Pontificia Accademia delle Scienze i Nuovi Lincei*, (2)13, [4]+1–1159+[1] pp.

Magnano, L., Osella, G. (1973) La coleottero fauna delle isole circum-siciliane: alcune osservazioni zoogeografiche. *Lavori della Società Italiana di Biogeografia*, N. S. 3 [1972], 621–649.

Marseul, M.S.A. de (1872) Monographie des Otiorhynchides. *L'Abeille*, 10(1), 85–91.

Osella, G., Biondi, S., Di Marco, C., Magnano, L., Zuppa, A. (2005) Coleoptera Curculionidae. In: Ruffo S. & Stoch F. (eds). Checklist e distribuzione della fauna italiana. *Memorie del Museo Civico di Storia Naturale di Verona, Sezione Scienze della Vita*, (2)16, 231–234, with data on CD-ROM.

Osella, G., Riti, M. (1995) Arthropoda di Lampedusa, Linosa e Pantelleria (Canale di Sicilia, Mar Mediterraneo). Coleoptera Attelabidae, Apionidae, Brachyceridae e Curculionidae. *Il Naturalista siciliano*, 19 (Suppl.), 597–665.

Péricart, J. (1963) Description de trois nouvelles espèces de *Peritelus* et observations diverses (Coleoptera Curculionidae). *Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale di Milano*, 100(2), 35–46.

Pericart, J. & Tempere, G. (1972) Nouvelles notes sur les Curculionides de Corse (Col.), *L'Entomologiste*, XXVIII, 1–2, 1972, 9.

Pic, M. (1908) Descriptions ou diagnoses et notes diverses. *L'Echange, Revue Linnéenne*, 282, 44.

Pierotti, H. (2006) Contributi al riordinamento sistematico dei Peritelini paleartici VI. *Peritelus e Pseudomeira di Tunisia (Coleoptera Curculionidae)*. *Bulletin de la Société entomologique de France*, 111(1), 21–34.

Pierotti, H. (2009) Peritelini nuovi o interessanti della fauna tirrenica X. *Pseudomeira exigua* (Stierlin, 1861) e specie vicine. (Coleoptera:Curculionidae:Entiminae). *Beiträge zur Entr. Keltern*, 59 (2), 481–488.

Pierotti, H., Bellò, C. (1994) Peritelini nuovi o interessanti della fauna tirrenica (Coleoptera Curculionidae Polydrosinae). 3° contributo alla conoscenza della tribù Peritelini. *Il Naturalista Siciliano*, 18(1–2), 107–122.

Pierotti, H., Bellò, C. (1995) Le *Pseudomeira* della fauna sardo-corsa (Coleoptera Curculionidae Polydrosinae) 4. Contributo alla conoscenza della tribù Peritelini. *Biogeographia*, vol. XVIII, p.p.523–545.

Pierotti, H., Bellò, C. (1997) Contributi al riordinamento sistematico dei Peritelini paleartici. *Bollettino del Museo Regionale di Scienze Naturali*, Vol.15 (1), Torino 1997, 157–177.

Pierotti, H., Bellò, C. (1998) Present knowledge of Palaearctic Peritelini (Coleoptera: Curculionidae: Polydrosinae). In: Colonnelli E., Louw S., & Osella G., (eds.). *Taxonomy, ecology and distribution of Curculionoidea. Proceedings of Symposium (28 august,1996, Florence, Italy)*. XX International Congress of Entomology. *Atti del Museo Regionale di Scienze Naturali*, Torino 1998, 81–108.

Pierotti, H., Bellò, C. (2000) - Contributi al riordinamento sistematico dei Peritelini paleartici. III. Revisione del gen. *Dolichomeira* Solari, 1954 (Coleoptera Curculionidae Polydrosinae). *Bollettino del Museo Civico di Storia Naturale di Verona*, Botanica Zoolo-gia, 24, 129–192.

Pierotti, H., Bellò, C. (2001) Peritelini nuovi o interessanti della fauna tirrenica VI. I Peritelini di Corsica (Coleoptera, Curculionidae). *Bulletin de la Société entomologique de France*, 106(1), 2001, 19–34.

Pierotti, H., Bellò, C., Alonso-Zarazaga, M.A. (2010) Contribution to the systematic rearrangement of the Palaearctic Peritelini. VI. A synthesis of the Spanish Peritelini (Coleoptera, Curculionidae, Entiminae). *Zootaxa*, 2376, 1–96.

Porta, A. (1932) Fauna Coleopterorum Italica. V. *Rhynchophora-Lamellicornia*. Stabilimento Tipografico Piacentino, Piacenza, 476 pp.

Porta, A.,(1959) Fauna Coleopterorum italicica. Supplementum III. Sanremo, 344pp.

Ragusa, E. (1874) Calendario coleotterologico per Palermo e dintorni. *Bullettino della Società Entomologica Italiana*, 6, 302–312.

Ragusa, E. (1904) Catalogo ragionato dei coleotteri di Sicilia (pars). *Il Naturalista Siciliano*, 17 [1904–1905], 57–59.

Rottenberg, A. von (1871) Beiträge zur Coleopteren-Fauna von Sicilien (Drittes Stück). *Berliner Entomologische Zeitschrift*, 15, 225–241.

Seidlitz, G. (1865) Monographie der Curculioniden-Gattung *Peritelus* Germ., *Berliner Entomologische Zeitschrift*, IX, 1865, 273–354, tab.IV.

Seidlitz, G. (1866) Monographie der Curculioniden-Gattung *Peritelus* Germ.. Dorpat, 1866,1–82.

Seidlitz, G. (1868) Die Otiorhynchiden s.str. nach den morphologischen Verwndtschaftsverhältnissen, Entomologischen Verein in Berlin, Berlin, 1868, 3, 27–33, 145.

Solari, A., Solari, F. (1907) Descrizione di alcune forme di Curculionidi italiani. *Rivista Coleotterologica Italiana*, 5(4), 117–121.

Solari, F. (1955) Proposta di un riordinamento delle tribù degli Otiorhynchini e dei Peritelini e creazione di tre nuovi generi di questi ultimi (Col. Curculionidae). *Memorie della Società Entomologica Italiana*, 33[1954], 33–63.

Sparacio, I. (1999) Coleotteri di Sicilia. Parte III. In: Riggio S. (ed.) *Mediterraneo, Guide naturalistiche 8. L'Epos*, Palermo, 191 pp.

Stierlin, W.G. (1861) Revision der europäischen *Otiorhynchus* Arten. *Berliner Entomologische Zeitschrift*, Beiheft 5, 344 pp.

Stierlin, W.G. (1864) Ueber einige neue und wenig bekannte sicilianische Käferarten. *Berliner Entomologische Zeitschrift*, VIII, 1864: 150.

Stierlin, W.G. (1881) Beschreibung einiger neu Russelkafer. *Mittheilungen der Schweizer entomologischen Gesellschaft*. VI, 1880–83, p.160.

Stierlin, W.G. (1883) Bestimmungstabellen europäischer Coleoptern-Curculionidae. *Mittheilungen der Schweizer entomologischen Gesellschaft*. 9, 1883, p.183.

Stroscio S., Baviera C., Frati F., Lo Paro G., Nardi F., 2011 — Deep genetic divergence in the darkling beetle *Pimelia rugulosa* Ger-mar, 1824 (Coleoptera, Tenebrionidae) reflects Plio-Pleistocene paleogeographic history of Sicily. — *Journal of Zoological Systematics and Evolutionary Research*. (in print)

Vitale, F. (1890) Studii su l'entomologia sicula. Nota II. Gli otiorhynchidi (Lac.) messinesi. *Il Naturalista Siciliano*, 10, 31–39.

Vitale, F. (1892) Catalogo sinonimico e topografico dei Curculionidi di Sicilia — *Il Naturalista Siciliano*., Palermo, XII, (1891-92), 219–234.

Vitale, F. (1900a) I rincofori siciliani. Catalogo generale sinonimico-topografico. *Estratto degli Atti e rendiconti dell'Accademia Daf-nica*, Acireale, Vol. VII.

Vitale, F. (1900b) Noterelle di coleotterologia sicula. *Il Naturalista Siciliano*, 19, 125.

Vitale, F. (1901) Contribuzione allo studio dell'entomologia sicula: i rincofori messinesi - *Atti della Regia Accademia Peloritana, Messina*, 15, 417–454.

Vitale, F. (1902) Gennaio un giorno di caccia entomologica - *Rivista Italiana di Scienze Naturali*, 22, 1–4, 38–40.

Vitale, F. (1903a) Specie e varietà nuove di curculionidi siciliani. *Rivista Coleotterologica Italiana*, Camerino, I, 21–24, 42–45.

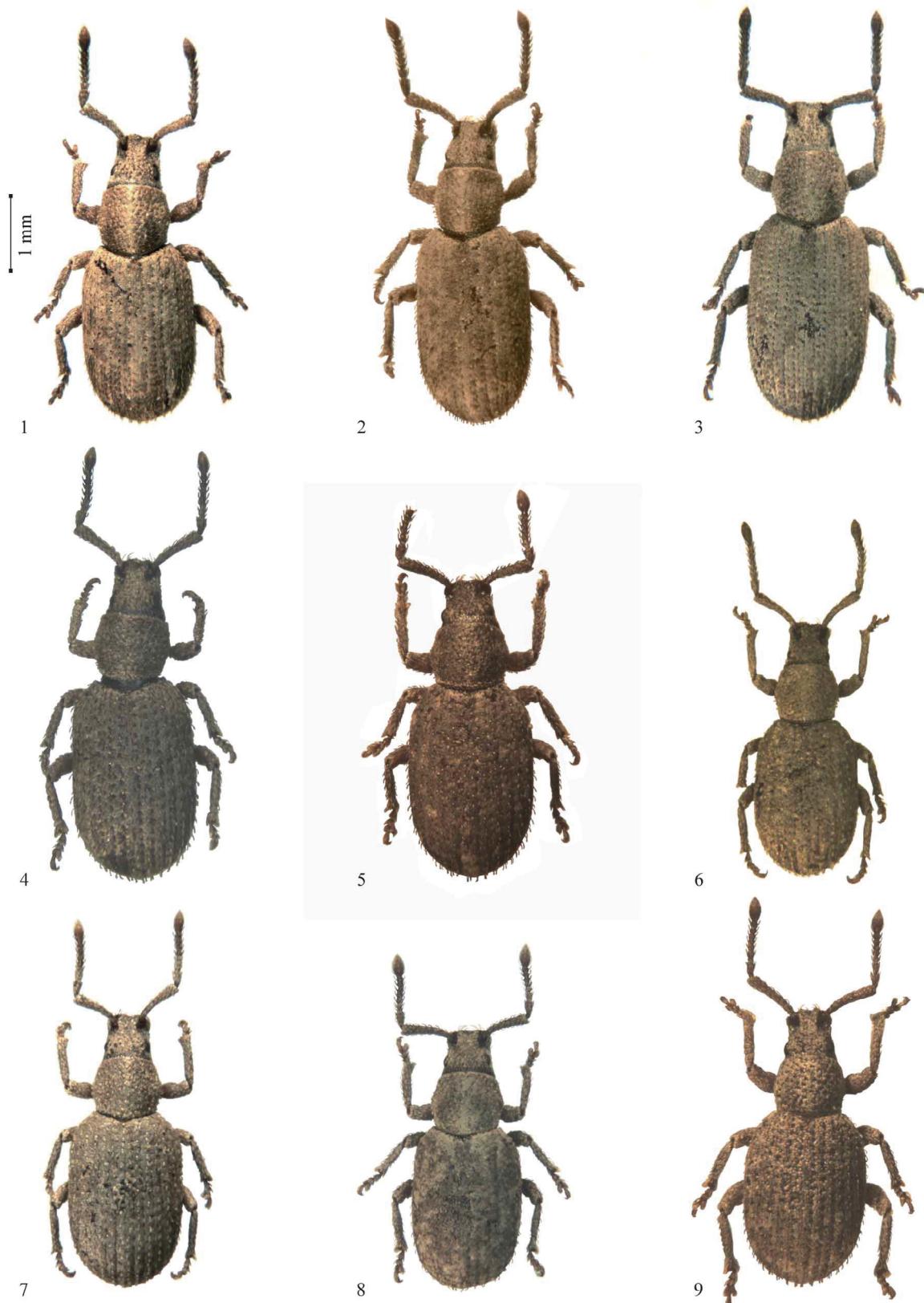
Vitale, F. (1903b) I rincofori siciliani. Primo supplemento. *Rendiconti dell'Accademia Dafnica*, 10, 1–10.

Vitale, F. (1904). Le somiglianze protettive nei curculionidi. Nota I<sup>a</sup> Mimetismo - *Rivista Italiana di Scienze Naturali*, 24(1), 2–16, 1–41–145.

Vitale, F. (1905) Supplemento al catalogo generale Curculionidae. *Atti Regia Accademia Scienze Peloritana*, Messina, XX, 196, 209.

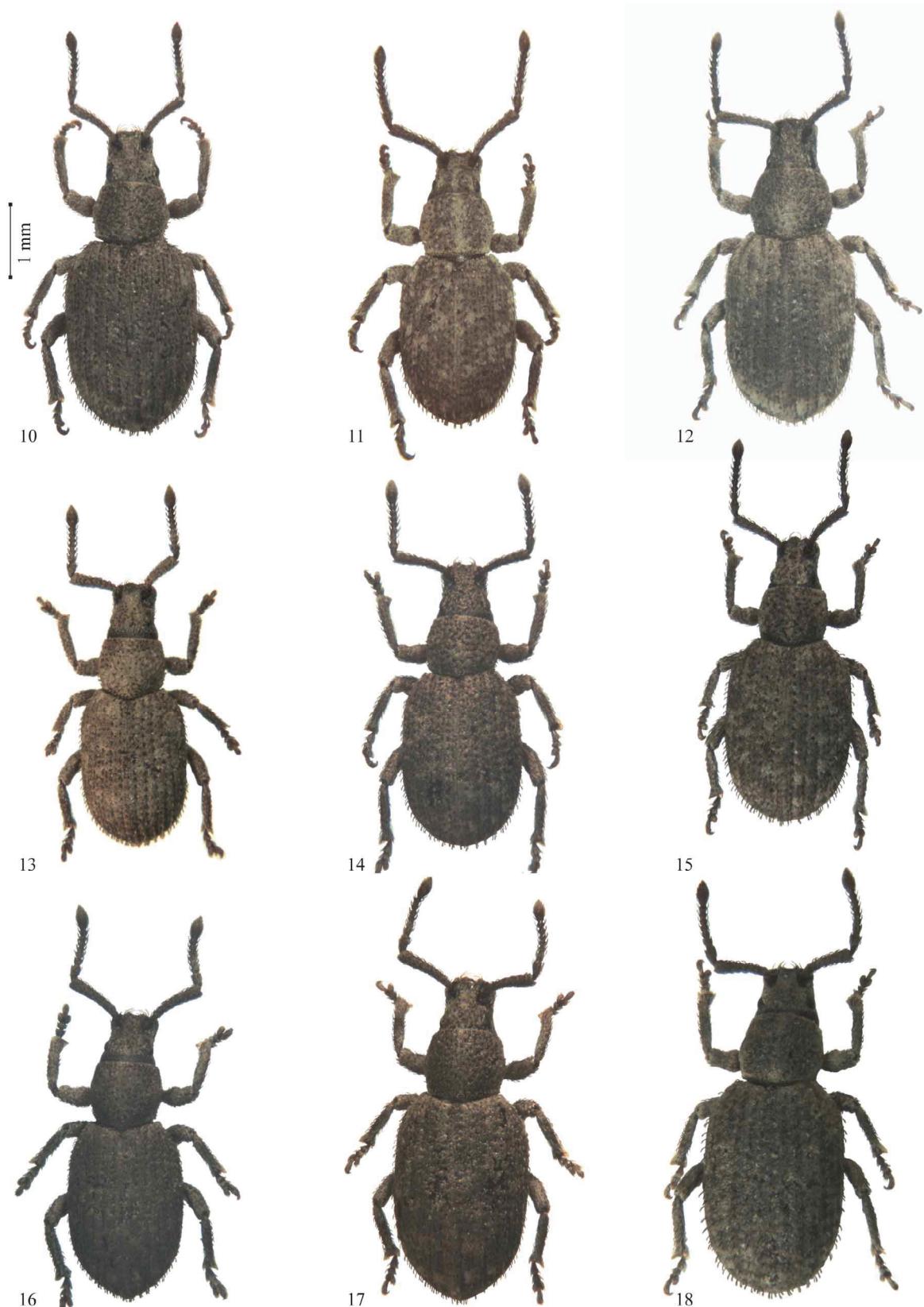
Vitale, F. (1906a) I coleotteri messinesi (continuazione). *Bollettino del Naturalista Colletore, Allevatore, Coltivatore, Acclimatatore* (Supplemento mensile alla *Rivista italiana di Scienze Naturali ed al Giornale Ornitologico italiano*), 26(9), 85–88.

Vitale, F. (1906b) I coleotteri messinesi (continuazione). *Bollettino del Naturalista Colletore, Allevatore, Coltivatore, Acclimatatore* (Supplemento mensile alla *Rivista italiana di Scienze Naturali ed al Giornale Ornitologico italiano*), 26(1), 1–2.



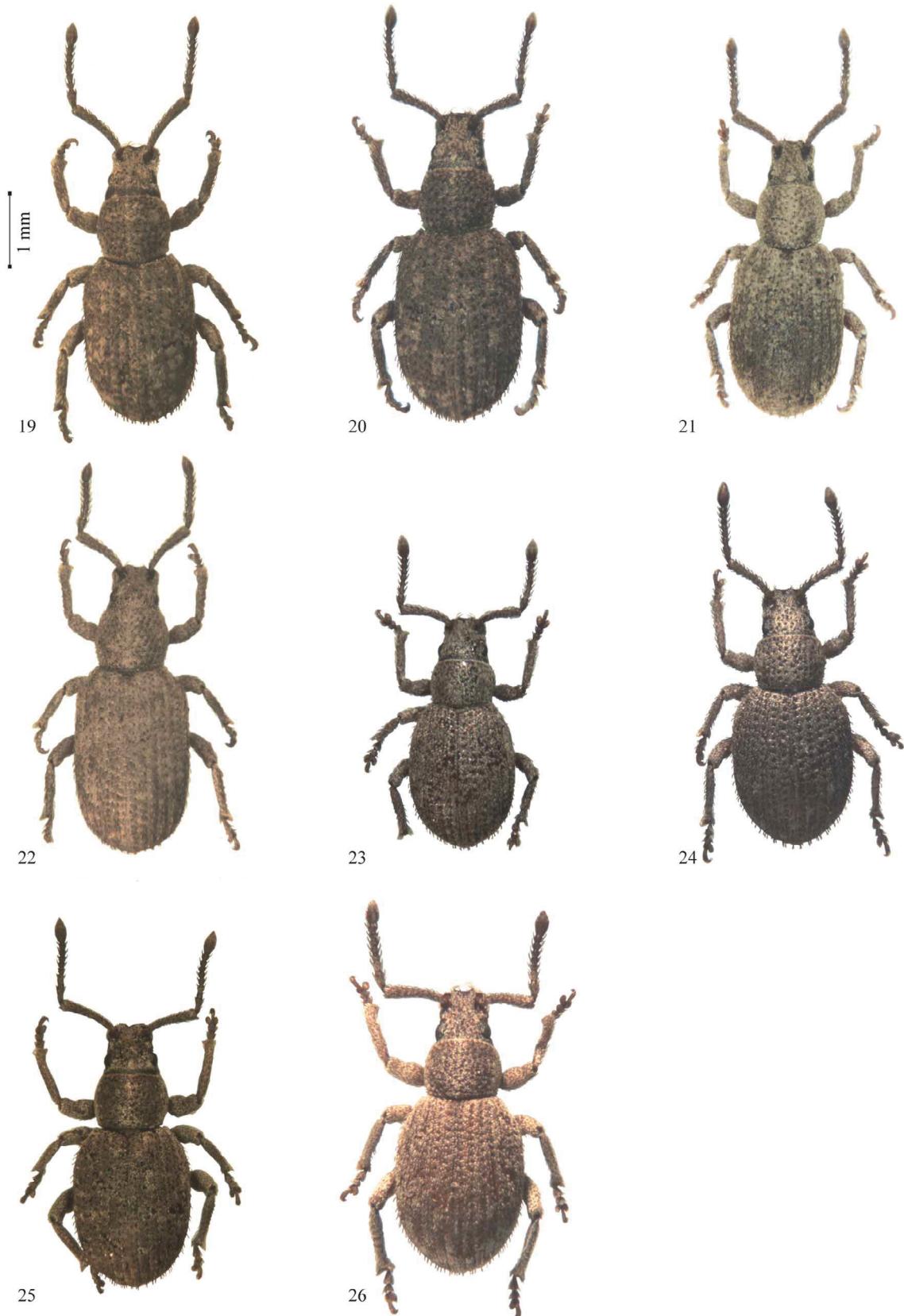
**FIGURES 1–9.** Habitus of *Pseudomeira* ssp. (scale bar: 1 mm).

1—*Ps. exigua* (Stierlin, 1861) ♂ from Monte Pellegrino (Palermo); 2—*Ps. exigua* (Stierlin, 1861) ♀ from Monte Pellegrino (Palermo); 3—*Ps. pfisteri* (Stierlin, 1864) ♀ from Monte Pellegrino (Palermo); 4—*Ps. nebrodensis* Pierotti, 2009 paratype ♀ from San Fratello (Messina); 5—*Ps. ficuzzensis* sp. n. holotype ♀ from Bosco Ficuzza (Palermo); 6—*Ps. himerensis* sp. n. holotype ♂ from Termini Imerese (Palermo); 7—*Ps. himerensis* sp. n. paratype ♀ from Termini Imerese (Palermo); 8—*Ps. petrensis* sp. n. holotype ♀ from Piano Battaglietta (Palermo); 9—*Ps. vitalei* (Desbrochers, 1892) ♂ from Castanea (Messina).



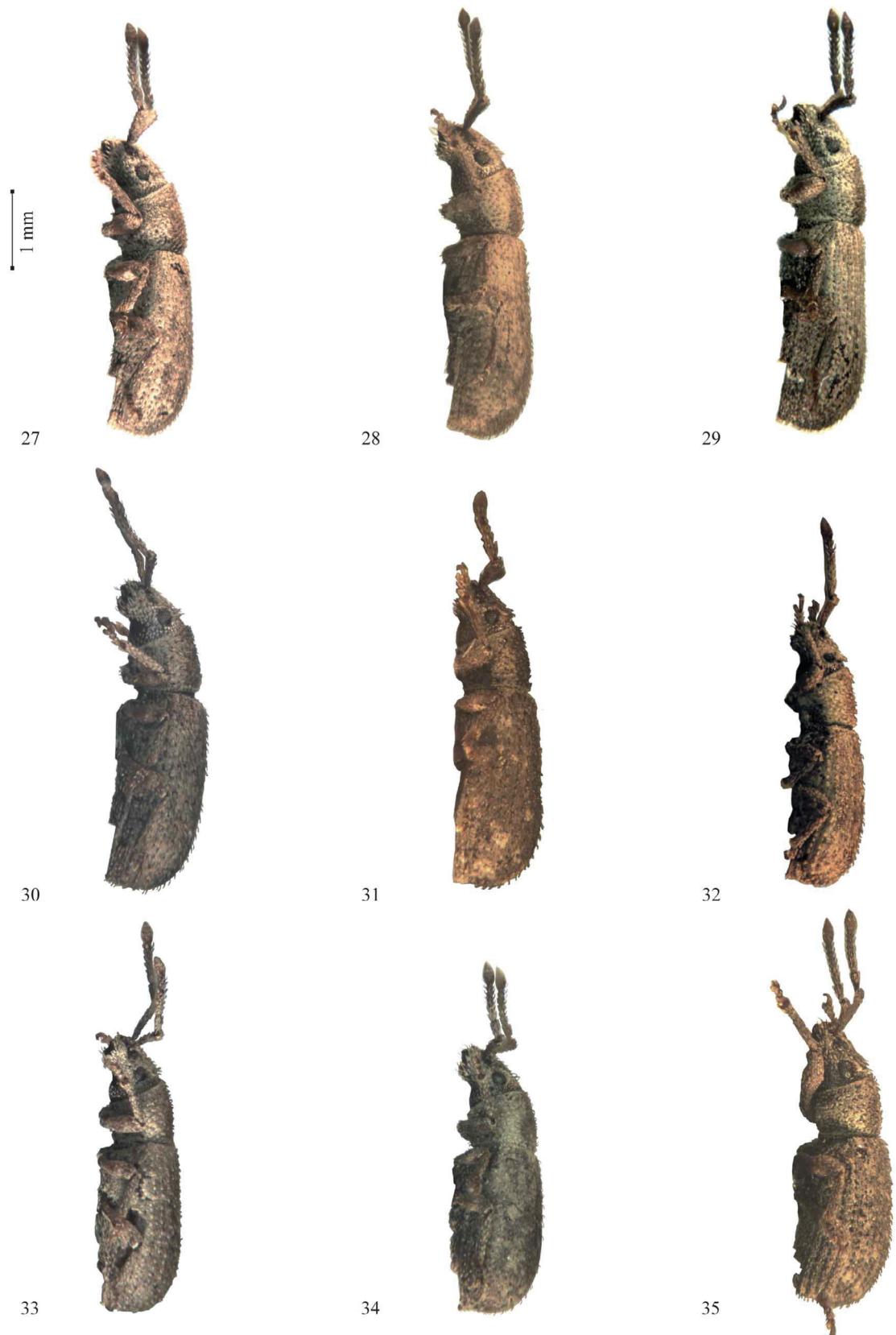
**FIGURES 10–18.** Habitus of *Pseudomeira* spp. (scale bar: 1 mm).

10—*Ps. vitalei* (Desbrochers, 1892) ♀ from Tono (Messina); 11—*Ps. reitteri* (Vitale, 1903) **neotype** ♂ from Castroreale (Messina); 12—*Ps. reitteri* (Vitale, 1903) ♀ from Castroreale (Messina); 13—*Ps. doderoi* Solari, 1954 holotype ♂ from Pachino (Siracusa); 14—*Ps. solarii* (Péricart, 1963) holotype ♂ from Gibilmanna (Palermo); 15—*Ps. solarii* (Péricart, 1963) ♀ from Gibilmanna (Palermo); 16—*Ps. osellai* Pierotti & Bellò, 1994 holotype ♂ from Bosco Bauli (Siracusa); 17—*Ps. osellai* Pierotti & Bellò, 1994 paratype ♀ from Bosco Bauli (Siracusa); 18—*Ps. erinacea* sp. n. holotype ♀ from Castiglione di Sicilia (Catania).

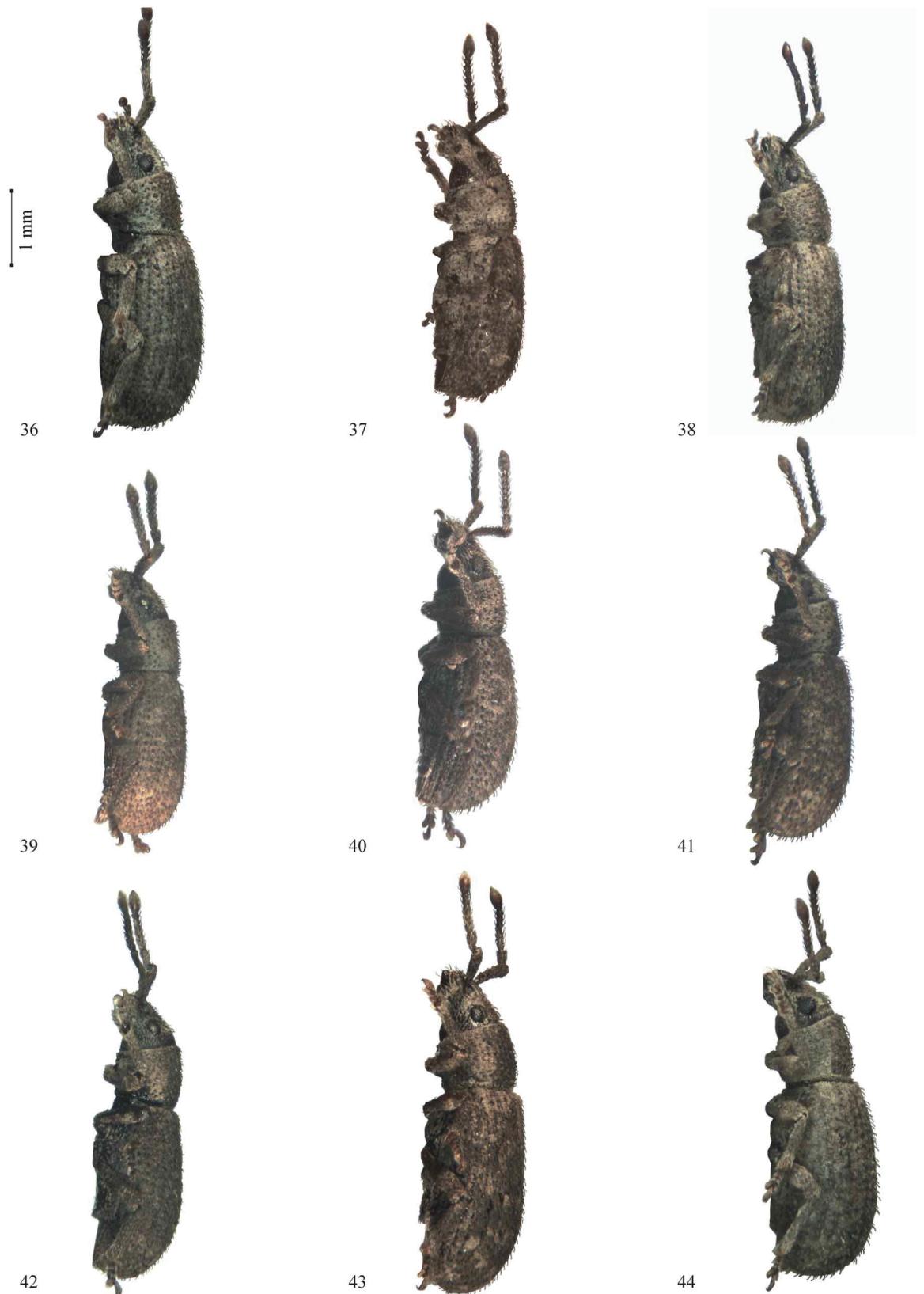


**FIGURES 19–26.** Habitus of *Pseudomeira* spp. (scale bar: 1 mm).

19—*Ps. natalii* sp. n. holotype ♂ from San Fratello (Messina); 20—*Ps. natalii* sp. n. paratype ♀ from San Fratello (Messina); 21—*Ps. trinacriae* sp. n. holotype ♂ from Altavilla Milicia (Palermo); 22—*Ps. trinacriae* sp. n. paratype ♀ from Altavilla Milicia (Palermo); 23—*Ps. obscura* (A. & F. Solari, 1907) lectotype ♂ from Messina; 24—*Ps. obscurella* Pierotti & Bellò, 1994 ♀ from Portella Armaceria (Messina); 25—*Ps. cossyrica* Pierotti & Bellò, 1994 paratype ♂ from Pantelleria (Trapani); 26—*Ps. aeolica* Bellò, Pesarini & Pierotti, 1997 paratype ♂ from Salina (Messina).

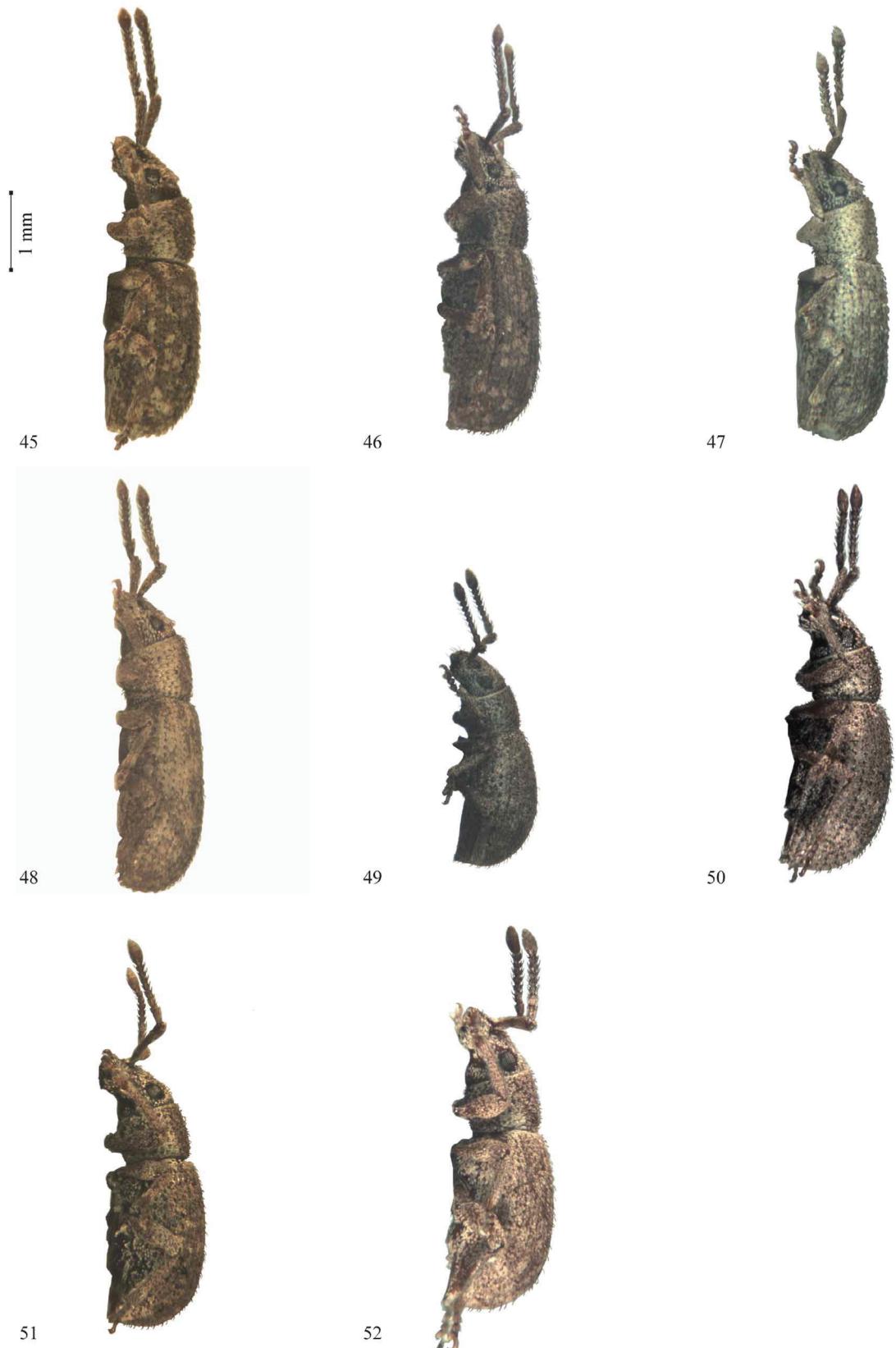


**FIGURES 27–35.** Lateral view of *Pseudomeira* ssp. (scale bar: 1 mm).  
 27—*Ps. exigua* (Stierlin, 1861) ♂ from Monte Pellegrino (Palermo); 28—*Ps. exigua* (Stierlin, 1861) ♀ from Monte Pellegrino (Palermo); 29—*Ps. pfisteri* (Stierlin, 1864) ♀ from Monte Pellegrino (Palermo); 30—*Ps. nebrodensis* Pierotti, 2009 paratype ♀ from San Fratello (Messina); 31—*Ps. ficuzzensis* sp. n. holotype ♀ from Bosco Ficuzza (Palermo); 32—*Ps. himerensis* sp. n. holotype ♂ from Termini Imerese (Palermo); 33—*Ps. himerensis* sp. n. paratype ♀ from Termini Imerese (Palermo); 34—*Ps. petrensis* sp. n. holotype ♀ from Piano Battaglietta (Palermo); 35—*Ps. vitalei* (Desbrochers, 1892) ♂ from Castanea (Messina).



**FIGURES 36–44.** Lateral view of *Pseudomeira* ssp. (scale bar: 1 mm).

36—*Ps. vitalei* (Desbrochers, 1892) ♀ from Tono (Messina); 37—*Ps. reitteri* (Vitale, 1903) **neotype** ♂ from Castroreale (Messina); 38—*Ps. reitteri* (Vitale, 1903) ♀ from Castroreale (Messina); 39—*Ps. doderoi* Solari, 1954 holotype ♂ from Pachino (Siracusa); 40—*Ps. solarii* (Péricart, 1963) holotype ♂ from Gibilmannu (Palermo); 41—*Ps. solarii* (Péricart, 1963) ♀ from Gibilmannu (Palermo); 42—*Ps. osellai* Pierotti & Bellò, 1994 holotype ♂ from Bosco Bauli (Siracusa); 43—*Ps. osellai* Pierotti & Bellò, 1994 paratype ♀ from Bosco Bauli (Siracusa); 44—*Ps. erinacea* sp. n. holotype ♀ from Castiglione di Sicilia (Catania).



**FIGURES 45–52.** Lateral view of *Pseudomeira* ssp. (scale bar: 1 mm).

45—*Ps. natalii* sp. n. holotype ♂ from San Fratello (Messina); 46—*Ps. natalii* sp. n. paratype ♀ from San Fratello (Messina); 47—*Ps. trinacriae* sp. n. holotype ♂ from Altavilla Milicia (Palermo); 48—*Ps. trinacriae* sp. n. paratype ♀ from Altavilla Milicia (Palermo); 49—*Ps. obscura* (A. & F. Solari, 1907) lectotype ♂ from Messina; 50—*Ps. obscurella* Pierotti & Bellò, 1994 ♀ from Portella Armacera (Messina); 51—*Ps. cossyrica* Pierotti & Bellò, 1994 paratype ♂ from Pantelleria (Trapani); 52—*Ps. aeolica* Bellò, Pesarini & Pierotti, 1997 paratype ♂ from Salina (Messina).



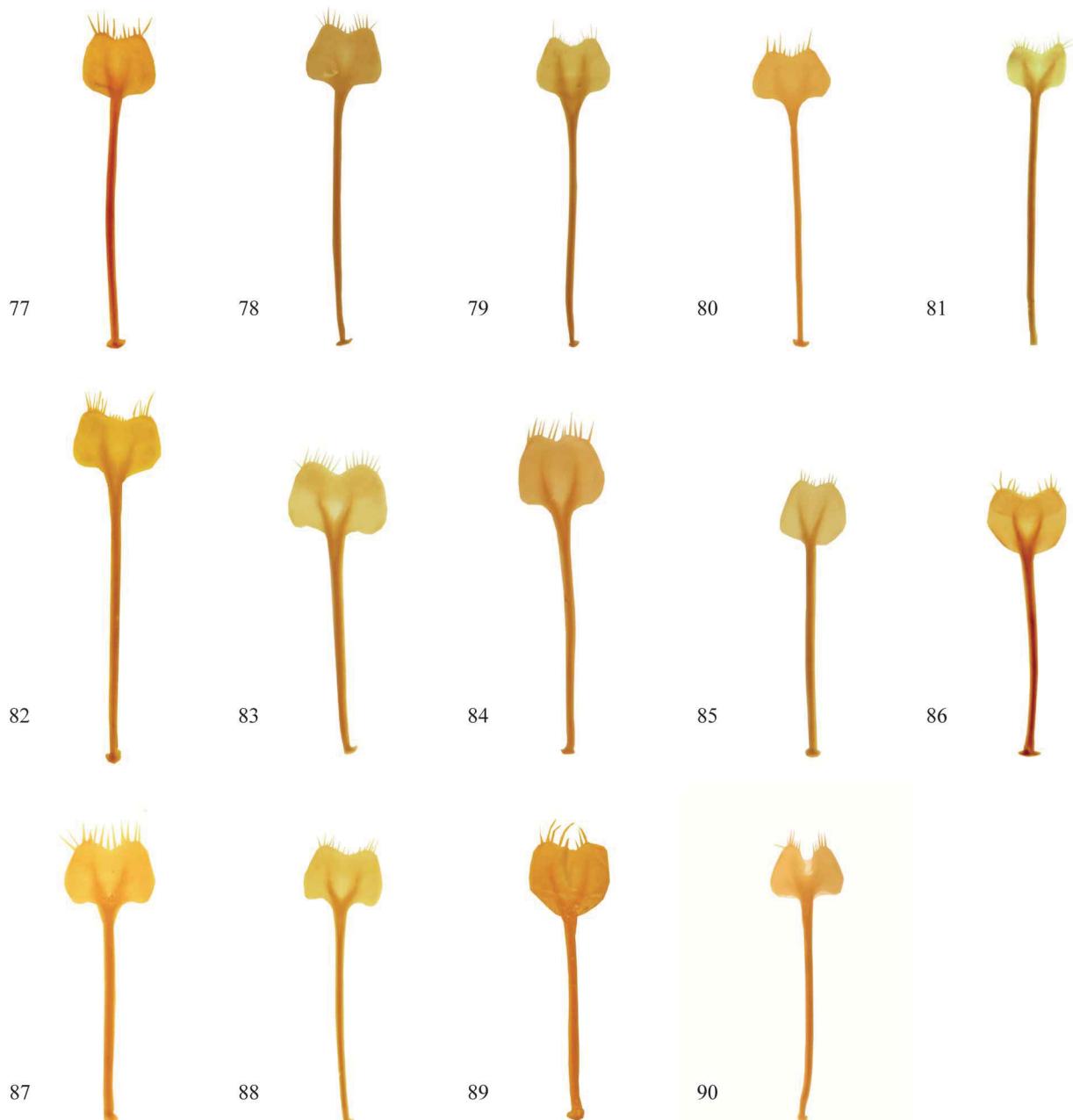
**FIGURES 53–64.** Aedeagus of *Pseudomeira* ssp.

53—*Ps. exigua* (Stierlin, 1861) ♂ from Monte Pellegrino (Palermo); 54—*Ps. himerensis* sp. n. holotype ♂ from Termini Imerese (Palermo); 55—*Ps. vitalei* (Desbrochers, 1892) ♂ from Castanea (Messina); 56—*Ps. reitteri* (Vitale, 1903) neotype ♂ from Castroreale (Messina); 57—*Ps. doderoi* Solari, 1954 holotype ♂ from Pachino (Siracusa); 58—*Ps. solarii* (Péricart, 1963) holotype ♂ from Gibilmanni (Palermo); 59—*Ps. osellai* Pierotti & Bellò, 1994 holotype ♂ from Bosco Bauli (Siracusa); 60—*Ps. natalii* sp. n. holotype ♂ from San Fratello (Messina); 61—*Ps. trinacriae* sp. n. holotype ♂ from Altavilla Milicia (Palermo); 62—*Ps. obscura* (A. & F. Solari, 1907) lectotype ♂ from Messina; 63—*Ps. cossyrica* Pierotti & Bellò, 1994 paratype ♂ from Pantelleria (Trapani); 64—*Ps. aeolica* Bellò, Pesarini & Pierotti, 1997 paratype ♂ from Salina (Messina).



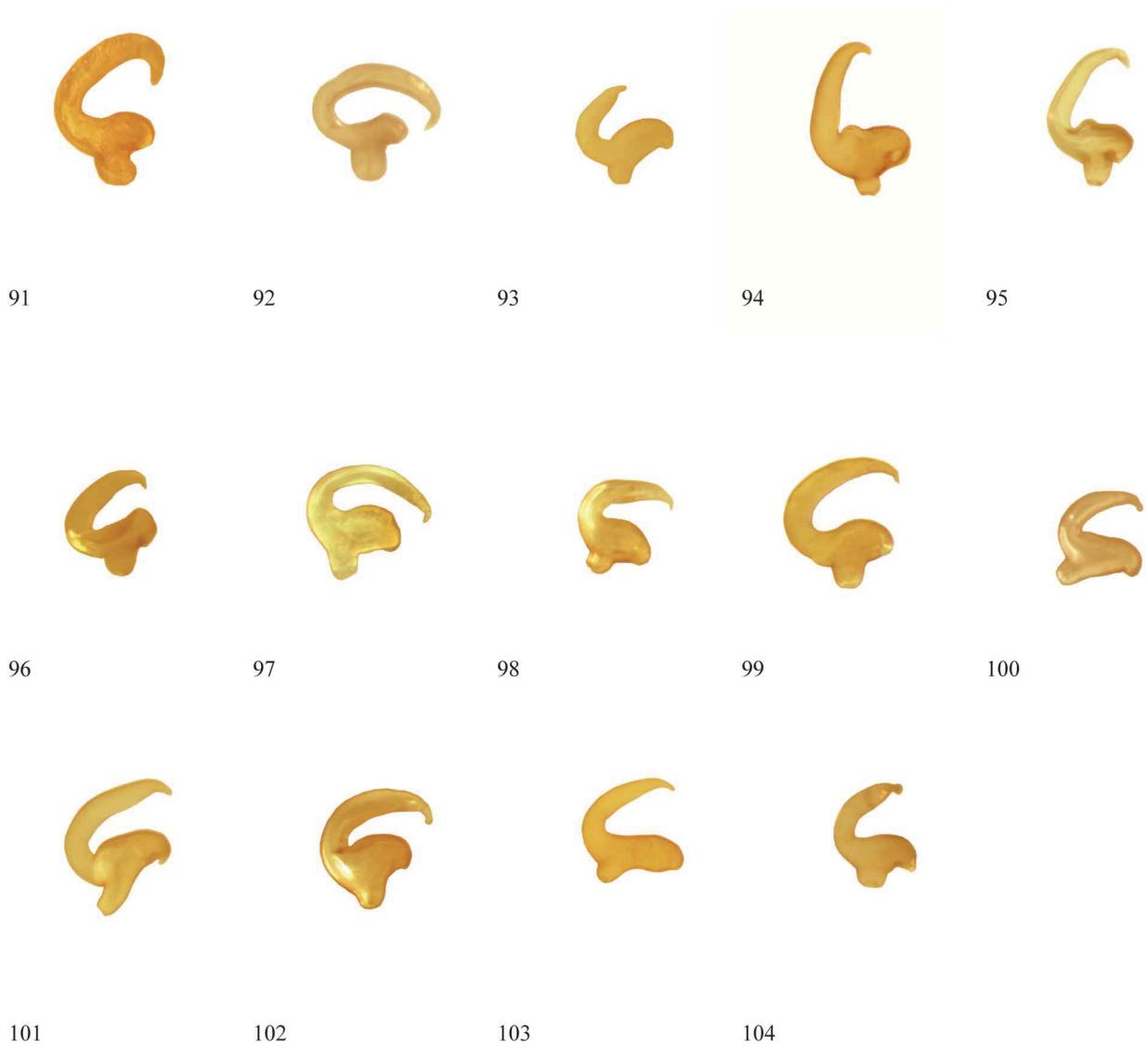
**FIGURES 65–76.** Apex aedeagus of *Pseudomeira* ssp.

65—*Ps. exigua* (Stierlin, 1861) ♂ from Monte Pellegrino (Palermo); 66—*Ps. himerensis* sp. n. holotype ♂ from Termini Imerese (Palermo); 67—*Ps. vitalei* (Desbrochers, 1892) ♂ from Castanea (Messina); 68—*Ps. reitteri* (Vitale, 1903) neotype ♂ from Castroreale (Messina); 69—*Ps. doderoi* Solari, 1954 holotype ♂ from Pachino (Siracusa); 70—*Ps. solarii* (Péricart, 1963) holotype ♂ from Gibilmanni (Palermo); 71—*Ps. osellai* Pierotti & Bellò, 1994 holotype ♂ from Bosco Bauli (Siracusa); 72—*Ps. natalii* sp. n. holotype ♂ from San Fratello (Messina); 73—*Ps. trinacriae* sp. n. holotype ♂ from Altavilla Milicia (Palermo); 74—*Ps. obscura* (A. & F. Solari, 1907) lectotype ♂ from Messina; 75—*Ps. cossyrica* Pierotti & Bellò, 1994 paratype ♂ from Pantelleria (Trapani); 76—*Ps. aeolica* Bellò, Pesarini & Pierotti, 1997 paratype ♂ from Salina (Messina).



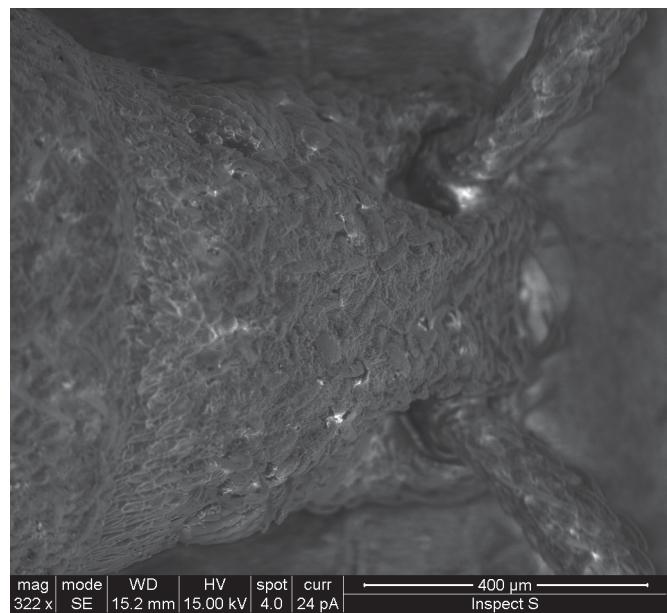
**FIGURES 77–90.** Spiculum ventrale of *Pseudomeira* ssp.

77—*Ps. exigua* (Stierlin, 1861) ♀ from Monte Pellegrino (Palermo); 78—*Ps. pfisteri* (Stierlin, 1864) ♀ from Monte Pellegrino (Palermo); 79—*Ps. nebrodensis* Pierotti, 2009 paratype ♀ from San Fratello (Messina); 80—*Ps. ficuzzensis* sp. n. holotype ♀ from Bosco Ficuzza (Palermo); 81—*Ps. himerensis* sp. n. paratype ♀ from Termini Imerese (Palermo); 82—*Ps. petrensis* sp. n. holotype ♀ from Piano Battaglietta (Palermo); 83—*Ps. vitalei* (Desbrochers, 1892) ♀ from Tono (Messina); 84—*Ps. reitteri* (Vitale, 1903) ♀ from Castoreale (Messina); 85—*Ps. solarii* (Péricart, 1963) ♀ from Gibilmannia (Palermo); 86—*Ps. osellai* Pierotti & Bellò, 1994 paratype ♀ from Bosco Bauli (Siracusa); 87—*Ps. erinacea* sp. n. holotype ♀ from Castiglione di Sicilia (Catania); 88—*Ps. natalii* sp. n. paratype ♀ from San Fratello (Messina); 89—*Ps. trinacriae* sp. n. paratype ♀ from Altavilla Milicia (Palermo); 90—*Ps. obscurella* Pierotti & Bellò, 1994 ♀ from Portella Armacera (Messina);

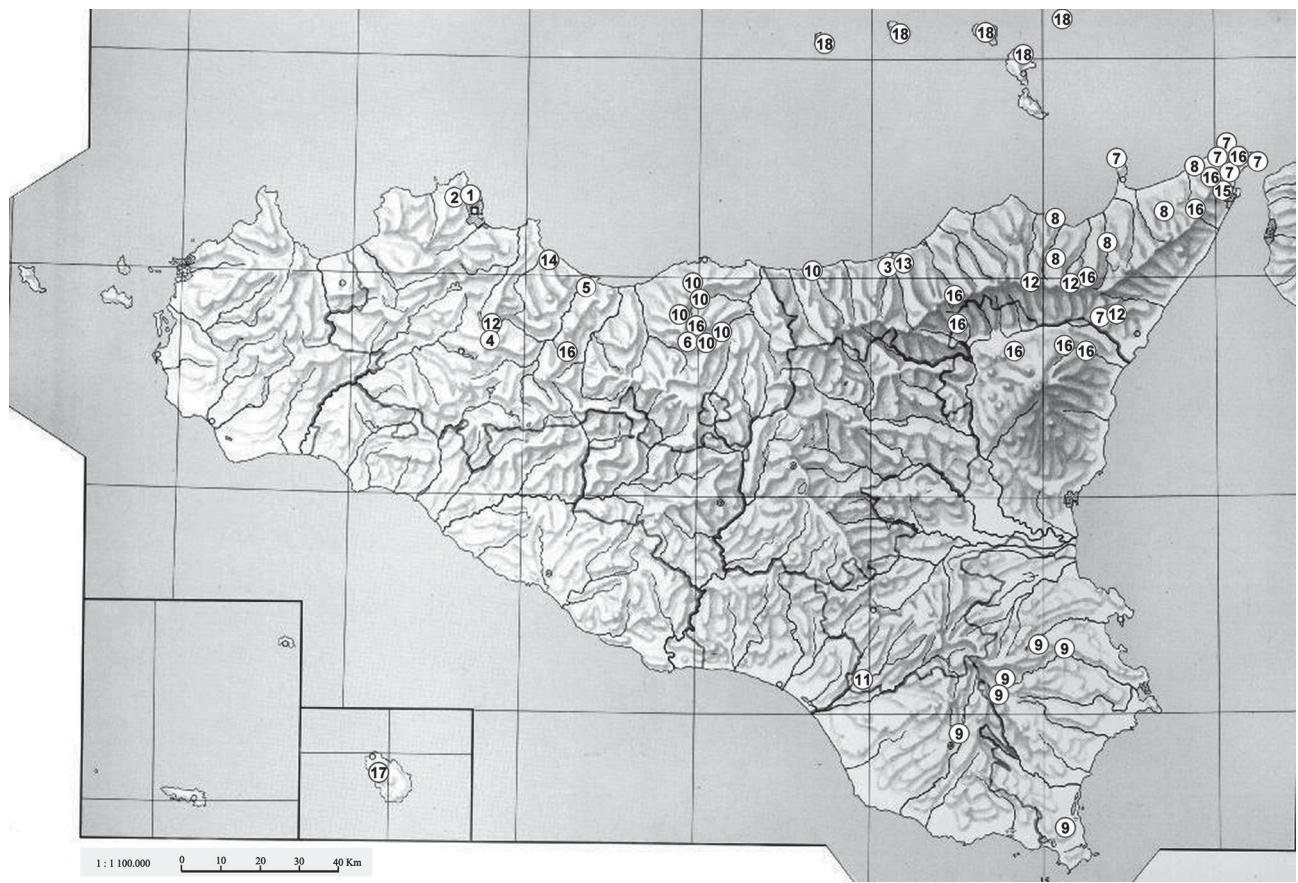


**FIGURES 91–104.** Spermatheca of *Pseudomeira* spp.

91—*Ps. exigua* (Stierlin, 1861) ♀ from Monte Pellegrino (Palermo); 92—*Ps. pfisteri* (Stierlin, 1864) ♀ from Monte Pellegrino (Palermo); 93—*Ps. nebrodensis* Pierotti, 2009 paratype ♀ from San Fratello (Messina); 94—*Ps. ficuzzensis* sp. n. holotype ♀ from Bosco Ficuzza (Palermo); 95—*Ps. himerensis* sp. n. paratype ♀ from Termini Imerese (Palermo); 96—*Ps. petrensis* sp. n. holotype ♀ from Piano Battaglietta (Palermo); 97—*Ps. vitalei* (Desbrochers, 1892) ♀ from Tono (Messina); 98—*Ps. reitteri* (Vitale, 1903) ♀ from Castroreale (Messina); 99—*Ps. solarii* (Péricart, 1963) ♀ from Gibilmanni (Palermo); 100—*Ps. osellai* Pierotti & Bellò, 1994 paratype ♀ from Bosco Bauli (Siracusa); 101—*Ps. erinacea* sp. n. holotype ♀ from Castiglione di Sicilia (Catania); 102—*Ps. natalii* sp. n. paratype ♀ from San Fratello (Messina); 103—*Ps. trinacriae* sp. n. paratype ♀ from Altavilla Milicia (Palermo); 104—*Ps. obscurella* Pierotti & Bellò, 1994 ♀ from Portella Armacera (Messina);



**FIGURE 105.** Dorsal view of rostrum in *Pseudomeira reitteri* (Vitale, 1903) from Castroreale (Messina).



**FIGURE 106.** Distribution of known species of *Pseudomeira* in Sicily and Sicilian islands: (1) *Ps. exigua* (Stierlin, 1861), (2) *Ps. pfisteri* (Stierlin, 1864), (3) *Ps. nebrodensis* Pierotti, 2009, (4) *Ps. ficuzzensis* sp. n., (5) *Ps. himerensis* sp. n., (6) *Ps. petrensis* sp. n., (7) *Ps. vitalei* (Desbrochers, 1892), (8) *Ps. reitteri* (Vitale, 1903), (9) *Ps. doderoi* Solari, 1954, (10) *Ps. solarii* (Péricart, 1963), (11) *Ps. osellai* Pierotti & Bellò, 1994, (12) *Ps. erinacea* sp. n., (13) *Ps. natalii* sp. n., (14) *Ps. trinacriae* sp. n., (15) *Ps. obscura* (A. & F. Solari, 1907), (16) *Ps. obscurella* Pierotti & Bellò, 1994, (17) *Ps. cossyrica* Pierotti & Bellò, 1994, (18) *Ps. aeolica* Bellò, Pesarini & Pierotti, 1997.



107



108

**FIGURES 107–108.** 107: Palermo, Monte Pellegrino, type locality of *Pseudomeira exigua* (Stierlin, 1861) and *Pseudomeira pfisteri* (Stierlin, 1864). 108: Palermo, Madonie mountain, Piano Battaglietta type locality of *Pseudomeira petrensis* sp. n.